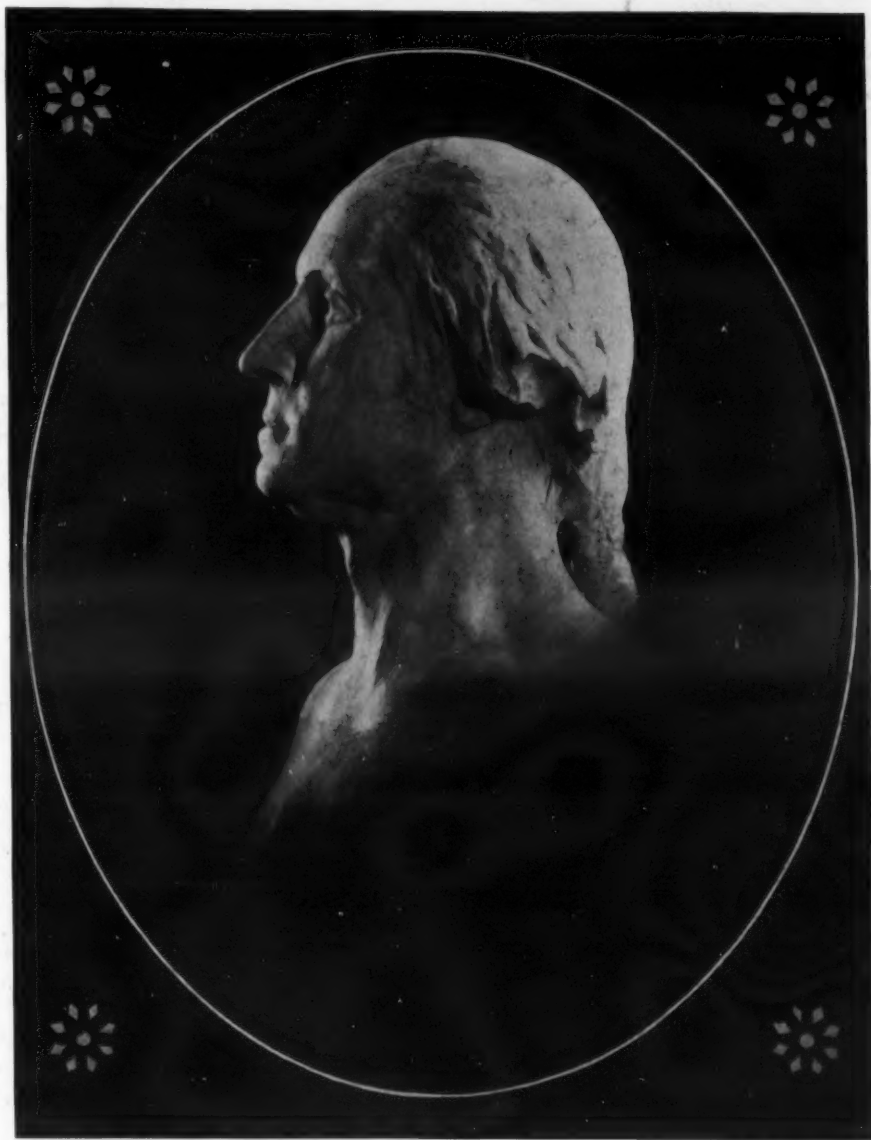


THE AMERICAN
School Board Journal

A PERIODICAL OF SCHOOL ADMINISTRATION



FEBRUARY 1932

The Bruce Publishing Company
New York Milwaukee Chicago

... for tomorrow and tomorrow and tomorrow



University of The City of Toledo, O.
Architects—Mills, Rhines, Bellman &
Nordhoff, Toledo. General Contrac-
tors—Henry J. Spieker Co., Toledo.

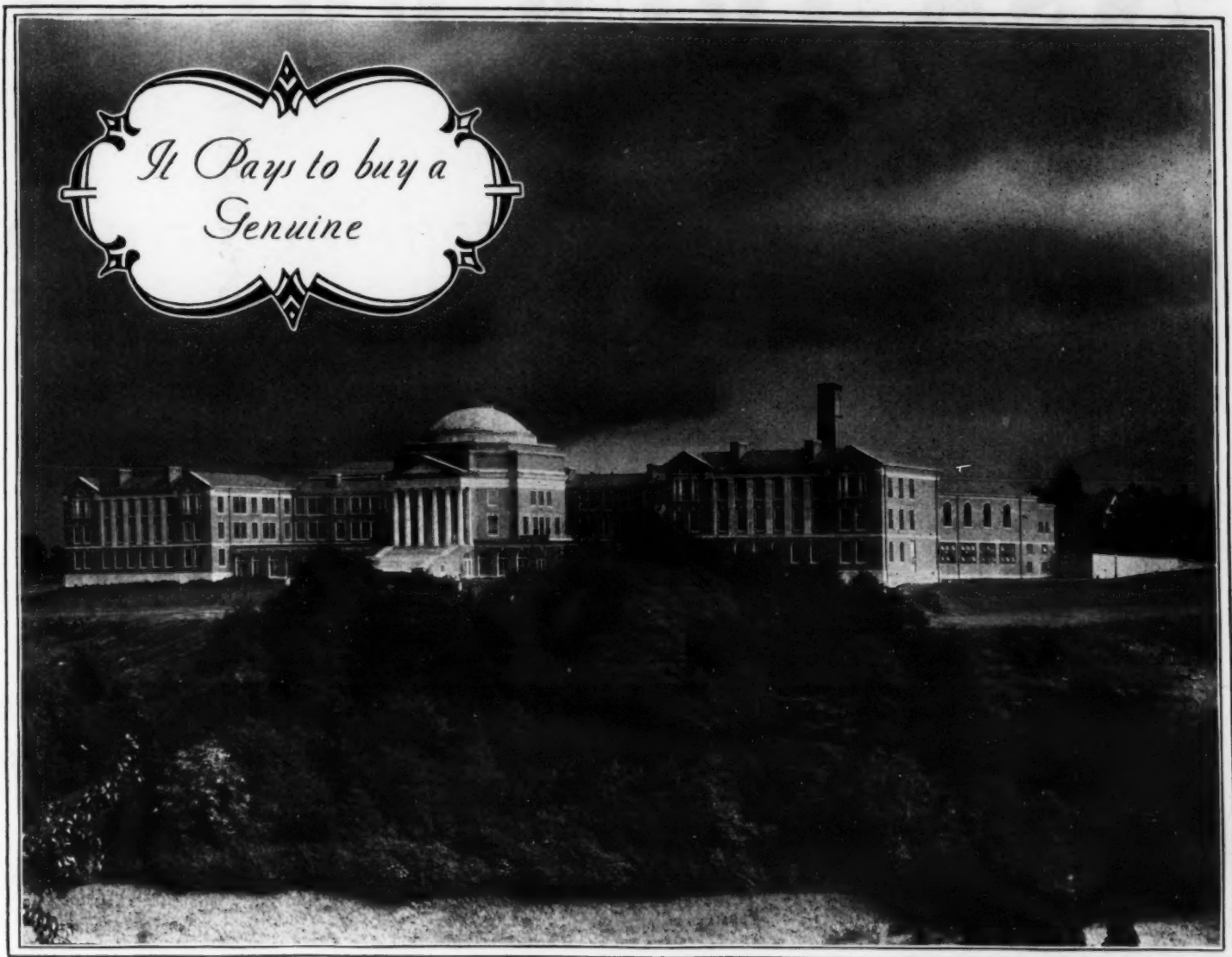
School and university buildings, perhaps more than any other public edifices, must be planned and designed so that their every aspect is inspiring, invigorating and, above all, practical. Today, for these structures, is but one very fleeting phase of their existence. They must continue to be pleasant and charming, beautiful, yet practical . . . tomorrow and tomorrow and tomorrow, for each succeeding year brings to them, for the first time, millions of fresh, impressionable minds.

It is the lasting brilliant finish of Libbey.Owens.Ford *flat drawn* Window Glass which makes it not only a practical and economical specification for school buildings of every kind, but very nearly an essential one if true beauty is to be created and *maintained*. • Ask your Architect about it when you plan new schools. Specify it for replacement. For your protection, the distinctive L.O.F label appears on each sheet of Libbey.Owens.Ford "A" Quality Glass.

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Department 2-D



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In recent years, the science of ventilation has been placed upon a sound physiological basis; hygienists know that effective ventilation is largely a matter of "sensible temperature," consisting of: 1. Proper room temperature. 2. Proper relative humidity. 3. Proper atmospheric activity.

To control these factors has been the problem of ventilation engineers, and after many years of study, research and practical experiment, *positive control* has been accomplished. It has come with the development of the Herman Nelson Her-Nel-Co System of Ventilation.

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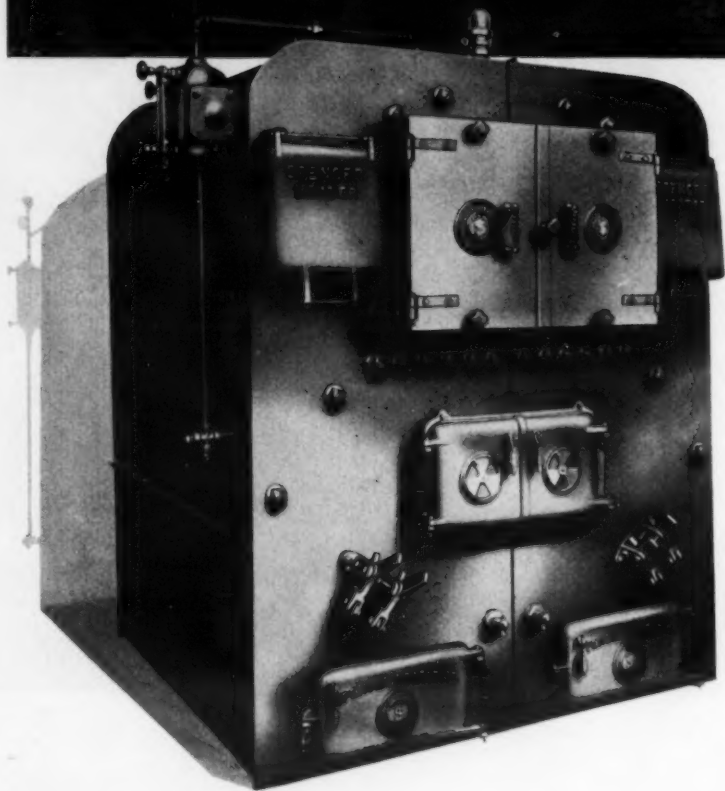
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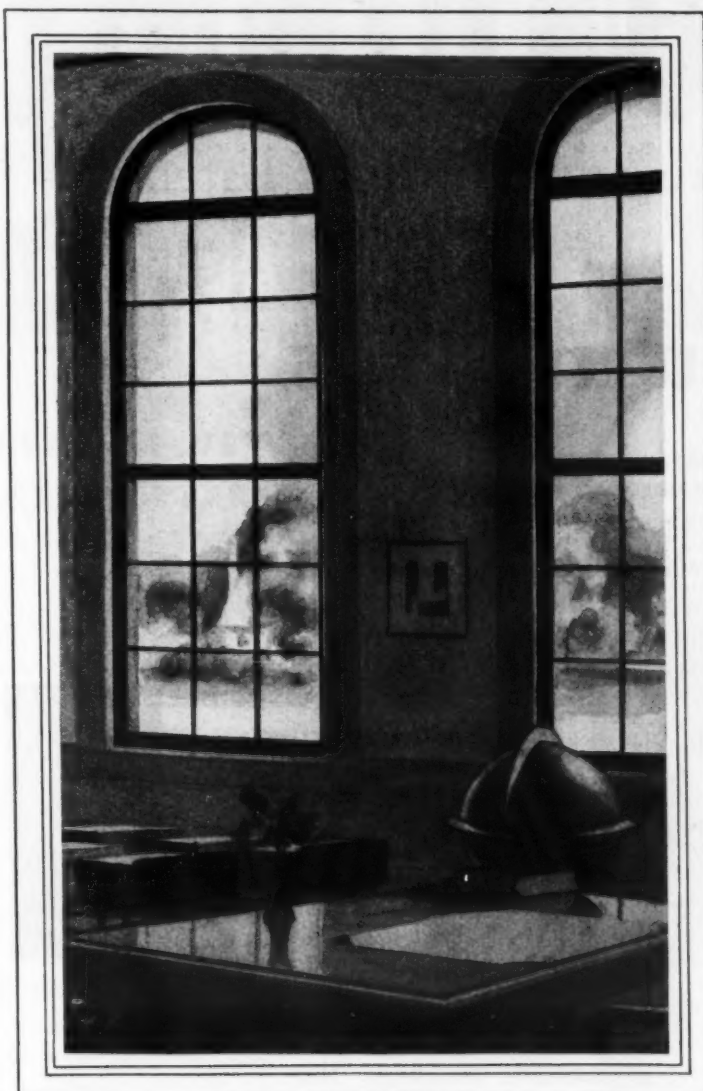
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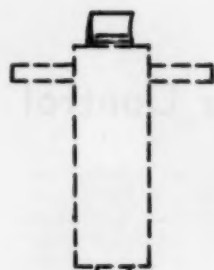
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And their fights are no sham battles.



But, after the smoke has cleared away, they have been responsible for the outstanding buildings, the schoolhouses that are, in very truth, monuments!

This word of ours, spoken in a day when many men are compromising with quality in an effort to save in the beginning and let upkeep take care of itself, this tribute - - - if we may use that expression - - - is published here that the courageous men who are doing big things may know that a lot of people still understand and appreciate the fight for quality and for plain old-fashioned square dealing.

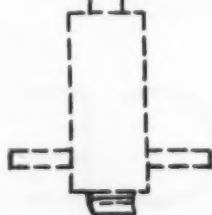
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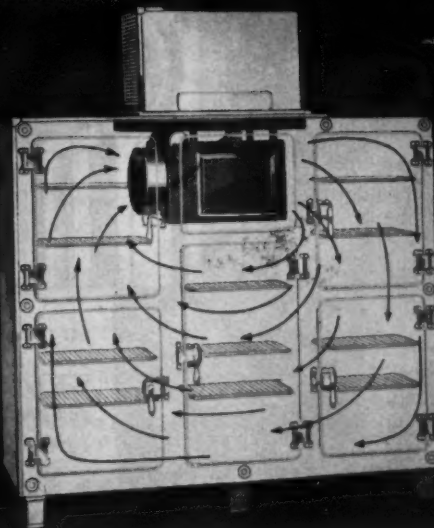
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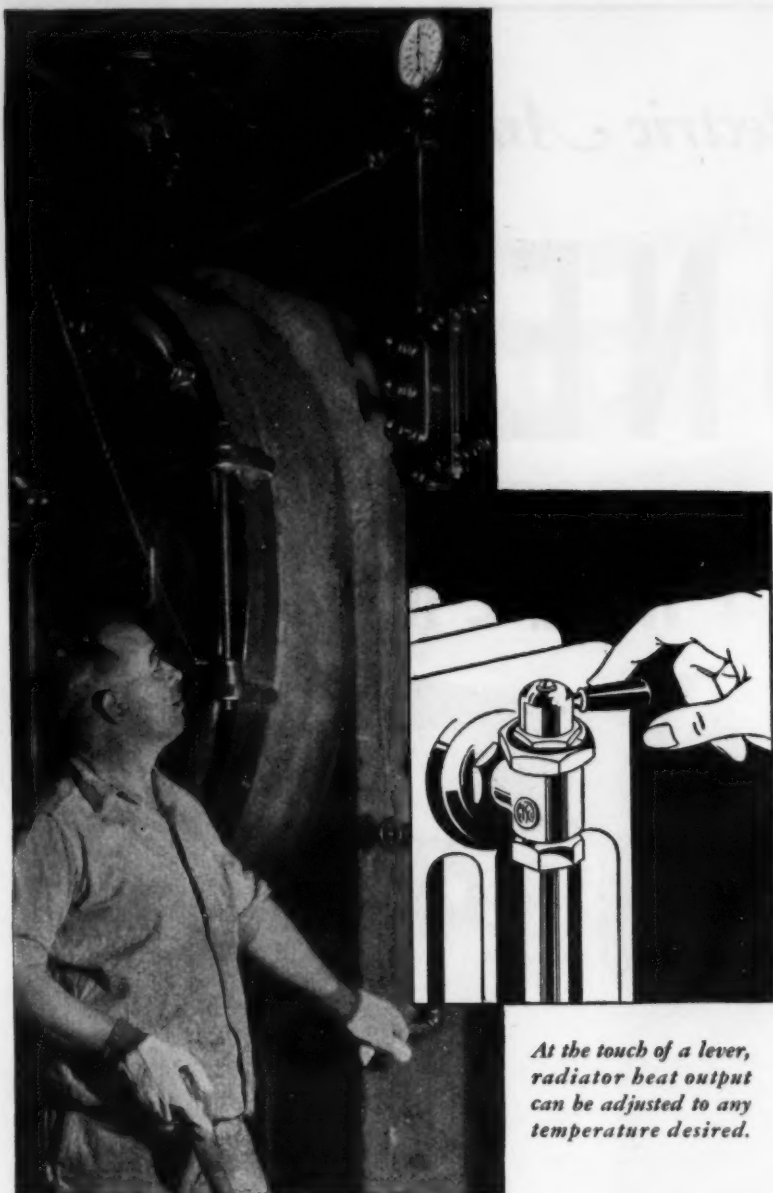
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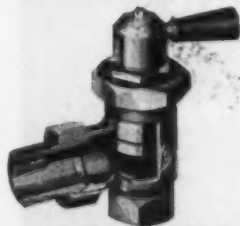
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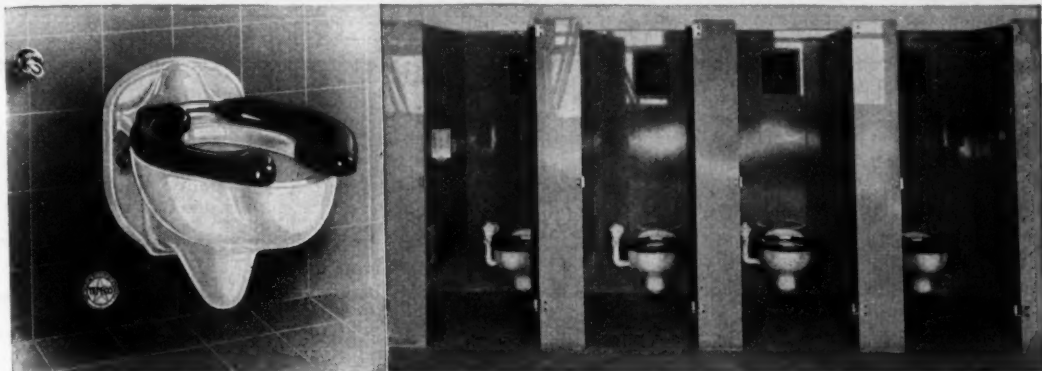
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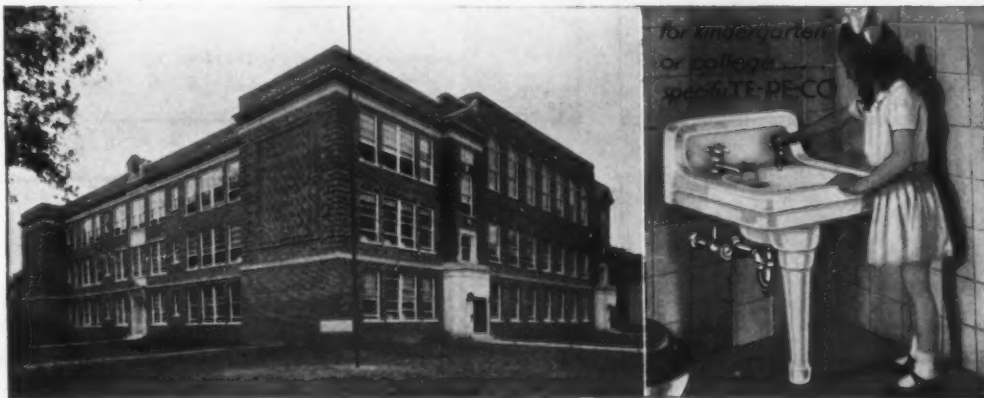
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A detailed black and white illustration of a knight in full plate armor, including a surcoat with a lion rampant. The knight is shown in profile, facing right, holding a spear in his right hand and a shield on his left arm. The shield features a circular emblem with a lion. In the background, a small castle with multiple towers and flags is visible on a hill. The knight's leg is extended, and a sword is visible at the bottom right.



An oval inset showing a Mimeograph machine, a device used for reproducing documents. It features a large wheel and a carriage with a sheet of paper being fed through it.

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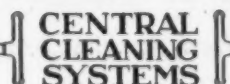


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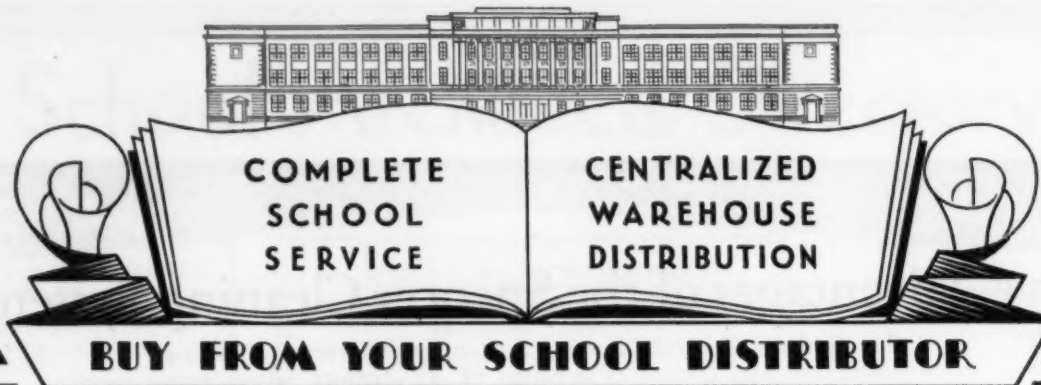
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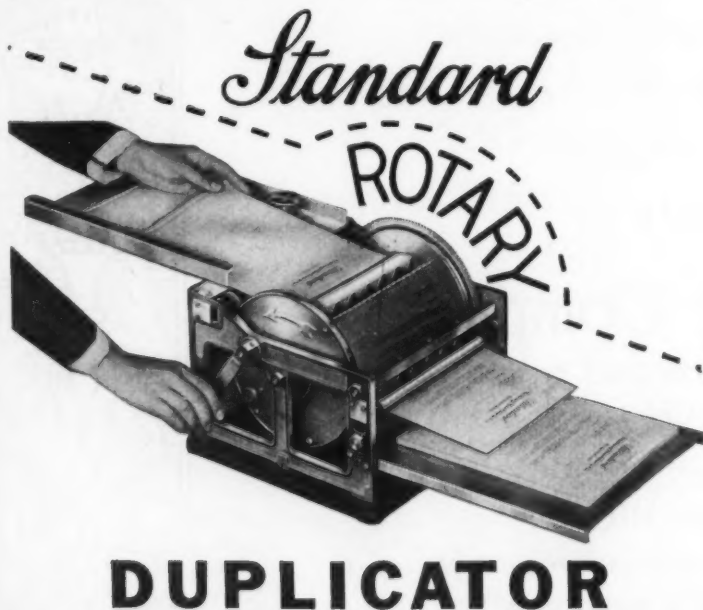
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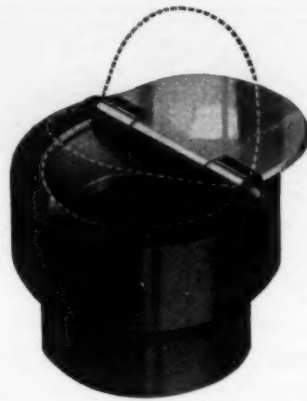
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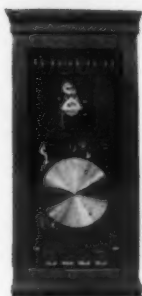
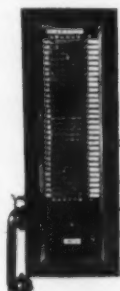


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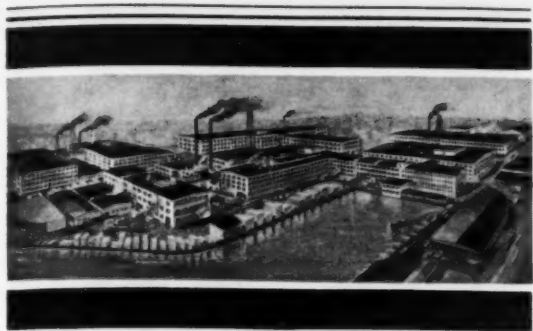
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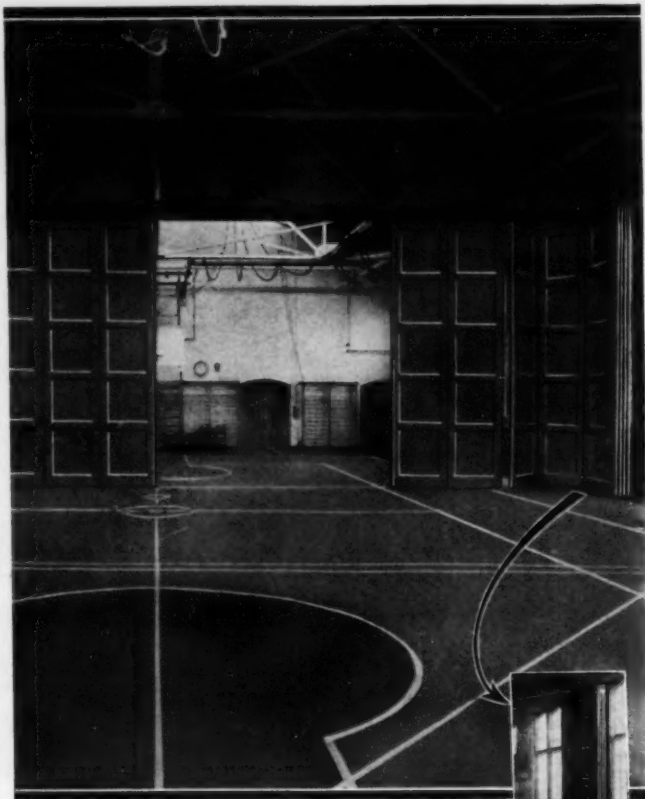
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VOL. 84
No. 2

THE AMERICAN School Board Journal

FEBRUARY,
1932

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What is Going On?

Those not immediately identified with the educational activities of the Nation are wondering how the economic situation affects the school interests. A frank answer must admit the fact that in spots the school interests are seriously affected. An equally frank statement will disclose the fact that the schools, as a whole, are as liberally financed as ever, and that the administration of the schools is proceeding in an orderly and efficient way.

The truth is that the financing of the public schools is undergoing a readjustment in practically all sections of the country. With the reduction in property values, the tax tribute naturally is lessened. School budgets cannot ignore this fact.

The economies engaged in at this time aim to eliminate the superfluous and the nonessential. Where, here and there, expansion programs have included the merely desirable, rather than the necessary, curtailments have been made. Some of these have been attended with the sensational cry of retrenchments, slashes, cuts, and the like.

The fact is that economy in school expenditures, consistent with the maintenance, has always been in order. What is more, it has always been practiced to a reasonable degree.

Thus, the public schools of the Nation will carry on with the same enthusiasm and momentum, upon the high standards of efficiency which have characterized them in recent years.

The spirit of optimism is fully warranted. The croakers and alarmists must retire. In the light of the situation, as a whole, accurately weighed out and estimated, a cheerful and confident outlook is quite in order.

THE EDITOR

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Editorial Material—Manuscripts and photographs bearing on school administration, superintendence, school architecture, and related topics are solicited, and will be paid for upon publication. Contributions should be mailed to Milwaukee direct, and should be accompanied by stamps for return, if unavailable. Open letters to the editor must in all cases contain the name and address of the writer, not necessarily for publication, but as evidence of good faith.

The contents of this issue are listed in the *Education Index*. Member, Audit Bureau of Circulation and Associated Business Papers.

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THE AMERICAN School Board Journal

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FEBRUARY, 1932

Subscription, \$3.00 the Year

Educational Rank of States, 1930

Frank M. Phillips, Washington, D. C.

INTRODUCTION

An early attempt to rank states educationally was made in 1912 by the Division of Education of the Russell Sage Foundation, and published in their circular No. 124 under the title, *A Comparative Study of Public School Education in the 48 States*, using data for 1910. The states were ranked in each of the following ten points:

1. Per cent of the children of school age enrolled in public and private schools.
2. Value of school property per child of school age.
3. Average expenditure per child of school age.
4. Average number of days attended by each child of school age.
5. Average number of days schools were kept open.
6. Per cent of days attended.
7. Expenditure for each \$100 of wealth.
8. Average daily cost per child attending.
9. Per cent high-school enrollment is of total.
10. Average annual salary of teachers.

A final summary of these ten ranks gives the following educational rank for 1910:

- | | | |
|-------------------|------------------|--------------------|
| 1. Washington | 17. Michigan | 33. West Virginia |
| 2. Massachusetts | 18. North Dakota | 34. Florida |
| 3. New York | 19. Idaho | 35. Delaware |
| 4. California | 20. Minnesota | 36. Maryland |
| 5. Connecticut | 21. Iowa | 37. Tennessee |
| 6. Ohio | 22. Maine | 38. Texas |
| 7. New Jersey | 23. Pennsylvania | 39. Louisiana |
| 8. Illinois | 24. Kansas | 40. New Mexico |
| 9. Colorado | 25. Nebraska | 41. Virginia |
| 10. Indiana | 26. South Dakota | 42. Kentucky |
| 11. Rhode Island | 27. Nevada | 43. Arkansas |
| 12. Vermont | 28. Wisconsin | 44. Georgia |
| 13. New Hampshire | 29. Wyoming | 45. Mississippi |
| 14. Utah | 30. Arizona | 46. North Carolina |
| 15. Oregon | 31. Oklahoma | 47. South Carolina |
| 16. Montana | 32. Missouri | 48. Alabama |

A more serious attempt to rank states educationally was made by Leonard P. Ayres in 1920, and the results were published by the Russell Sage Foundation in a monograph entitled, *An Index Number for State School Systems*. Ayres very carefully selected ten points upon which data were available, and which data he considered accurate enough for the purpose. These points are as follows:

1. Per cent of school population attending public schools daily.
2. Average number of days attended by each child of school age.
3. Average number of days public schools were kept open.
4. Per cent that high-school enrollment is of total enrollment.
5. Per cent that boys are of girls in high schools.
6. Average annual expenditure per child attending.
7. Average annual expenditure for each child of school age.
8. Average annual expenditure per teacher employed.
9. Expenditure per pupil for purposes other than salaries.
10. Expenditure per teacher for salaries.

In reducing these items to index numbers, item 1 is given a weight of 1, that is, taken as is; item 2 is divided by 2; item 3 is divided by 2; item 4 is multiplied by 3 in states with 12-year systems, and by 2.75 in states with 11-year systems; and item 5 is given a weight of 1. The remaining items have to do with expenditures. Item 6 is taken in multiples of \$100; item 7 in multiples of \$100; item 8 is divided by 24 and taken in multiples of \$100; item 9 is multiplied by 2 and taken

in multiples of \$100; and item 10 is divided by 12 and taken in multiples of \$100.

These ten index numbers are then given equal weight, added, and the sum divided by 10 for the state index. The state index numbers are then ranked to secure the educational rank of states. Indices were obtained for each state for 1890, 1900, 1910, 1916, and 1918.

Another attempt to rank states educationally was made by the writer, Frank M. Phillips, in 1924, and again in 1925, and the results were published by the Bruce Publishing Company, of Milwaukee, in a monograph entitled, *Educational Ranking of States by Two Methods*. This undertaking brought the Ayres system up to date, 1924, and for one ranking followed the Ayres scheme except that the financial items were deflated by use of the cost-of-living index published by the U. S. Bureau of Labor Statistics. This deflation process had the effect of reducing the financial data to the basis of the 1913 dollar.

The writer also set forth in this monograph another method of determining the educational rank of states, making use of the following points:

1. Percentage of illiterates in the population ten years of age and over.
2. Ratio of the number of children in average daily attendance in public schools to the number of age 5 to 17, inclusive.
3. Per cent that high-school enrollment is of total enrollment.
4. Average number of days attended by each child enrolled.
5. Average number of days schools were kept open.
6. Ratio of the number of students taking teacher-training courses to the number of teaching positions.
7. Per cent of high-school graduates continuing their education.
8. Total cost, excluding salaries, per pupil in average daily attendance.
9. Average annual salary of teachers, principals, and supervisors.
10. Total amount expended per child of school age.

Under this system the states are ranked in each of the ten points, and the ranks are then added to give a state total. The state with the smallest total of the ten ranks is given first place, the one with the next smallest is given second place, and so on.

Some of the points used by Phillips overlap those used by Ayres, but the newer method uses but 3 points having to do with costs instead of 5. The data used in each method deal with public elementary and high day schools, and are secondary data in that they were collected by governmental agencies for purposes other than for making an educational rank of states.

The 1925 publication includes state ranks by both methods for 1910, 1920, 1922, and 1924. The results are strikingly similar, as far as a comparison of the two methods is concerned. In 1910, 35 states differed by not more than 4 points; in 1918, 32 states; in 1920, 31 states; in 1922, 35 states; and in 1924, 33 states differed by not more than 4 points in rank. Fairly good positive correlations are found between the final rank and the rank in individual items, with the exception of the correlation between per cent of high-school graduates continuing their education and the other items. It so happens that this rate is high in those communities where high-school enrollments are proportionately low.

SECTION I State Ranks for 1930

The collection of basic material for the 1930 ranks was made from the states, unless otherwise indicated. Every effort was made to secure accurate information, but the final accuracy of state material rests with

the states themselves.¹ The response was 100 per cent perfect, and practically no estimates were made, excepting as indicated in the text which follows.

Tables I and II contain all the data upon which 1930 ranks are based. Other supplementary data are included for reference. A brief discussion of the items used in determining the 1930 ranks under both systems follows:

1. Per Cent of School Population in Average Daily Attendance

Since states differ in the age limits for school-census purposes, the time and the manner of taking this census, it has always seemed best to use data from the United States Census Bureau, and to use ages 5 to 17, inclusive. This count is accurate only for census years, and needs to be estimated for intercensal and for postcensal years. It is quite likely to be inaccurate for states having considerable migration, especially for years ending in 6, 7, 8, or 9, unless corrections are made after the latest census count is taken. Despite this handicap, census figures are, no doubt, better adapted for this purpose than are state figures, for reasons already given. Attendance data are secured from state reports.

2. Average Number of Days Attended by Each Child of School Age.

Again, census figures for the divisor and the dividend is the state total known as aggregate days of school attendance.

3. Average Number of Days Schools Were in Session

Every effort is made to secure the number of days upon which schools were actually open with children present for instruction, excluding holidays and other days when pupils are not expected to attend.

4. Per Cent High-School Enrollment is of Total Enrollment

The high-school enrollment used for this purpose includes those registered in the last four years of schoolwork only, usually grades 9, 10, 11, and 12, and includes only those actually presenting themselves for instruction. Junior-high-school pupils below these grades cannot well be included if comparisons are to be made over a period of years.

¹State officials are invited to scan Tables I and II and any other portions of this article, and to report corrections to the writer at 427 Investment Building, Washington, D. C., so that necessary changes may be made in reprints.

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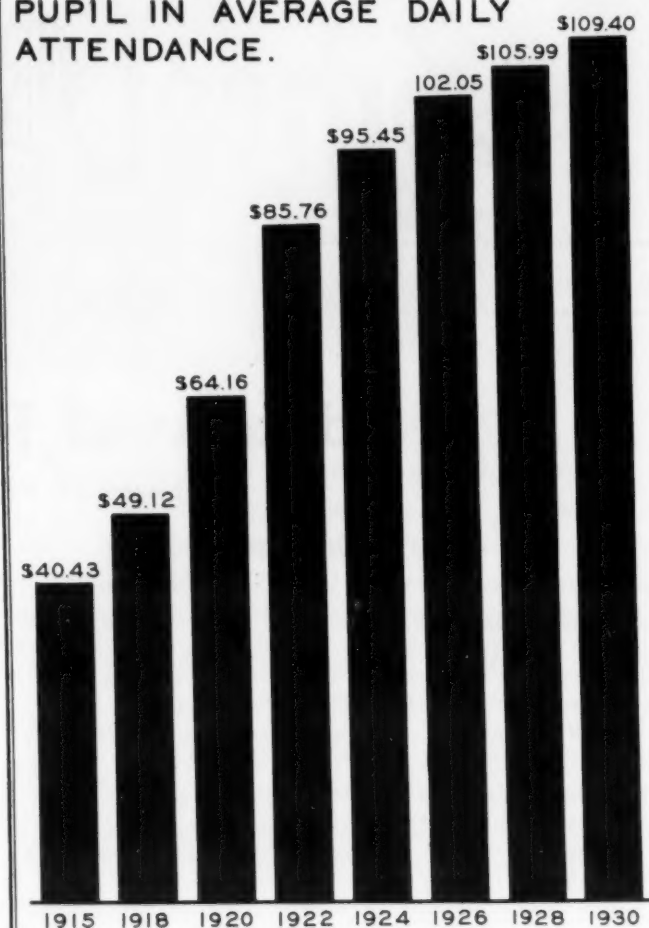


FIG. 1.

TABLE I. School Census, Enrollments, Attendance, Number of Teachers, and Expenditures for the School Year 1929-30

State	Number 5-17 Years of Age, Inclusive ¹	Total Number Enrolled	Number Enrolled in High Schools	Boys	Girls	Total	Number in Average Daily Attendance	Length of School Year, Days	Number of Teachers, Supervisors, Principals	Number of Teachers with 2 or More Years Training Above High School	Number of Students Taking Teacher Training	Number of High- School Graduates	Number of High- School Graduates Continuing Education	Total Cost Public Schools Excluding Payment Bonds and Debt Service	Current Expenses Including Interest	Salaries of Teachers, Supervisors, Principals
Continental																
United States	31,571,321	25,746,280	2,108,978	2,268,054	4,377,032	21,264,016	172.25	885,739	.....	362,293	624,607	255,011	\$2,326,358,942	\$1,885,740,251	\$1,260,684,216
Alabama	817,365	622,988	27,739	33,315	61,054	473,622	150.0	16,919	.....	12,604	8,400	3,592	22,654,507	17,566,516	13,365,098
Arizona	117,218	103,806	7,652	7,607	15,259	75,977	175.1	3,533	3,522	2,297	1,859	769	10,853,262	7,941,303	5,853,969	
Arkansas	560,048	456,354	21,266	24,614	45,880	335,219	147.2	10,696	.....	3,428	7,820	3,434	14,147,283	11,988,547	8,906,599
California	1,139,224	1,068,662	115,119	116,863	231,982	908,765	178.3	41,397	.....	17,027	35,236	12,245	147,475,575	121,669,272	84,832,920
Colorado	260,748	252,718	20,253	22,294	42,547	190,742	180.0	9,812	.....	6,059	6,962	2,736	26,213,618	22,885,276	14,539,403
Connecticut	402,773	319,453	28,122	31,228	59,350	272,308	184.0	10,843	.....	3,408	7,058	2,698	35,516,378	28,344,343	19,647,035
Delaware	57,609	43,147	3,227	3,782	7,009	37,170	178.5	1,467	1,200	556	947	573	5,240,272	3,467,260	2,303,698	
Dist. Columbin	88,104	80,965	7,965	8,434	16,399	67,455	175.8	2,924	.....	616	2,043	1,172	12,528,644	9,035,130	6,398,921
Florida	378,446	346,434	20,571	24,636	45,207	267,791	154.0	11,157	.....	3,222	3,660	1,852	18,527,846	13,419,351	9,542,993
Georgia	894,723	723,005	39,122	51,994	91,116	538,271	148.0	19,717	10,000	2,802	13,017	4,529	18,455,251	17,040,605	13,135,400	
Idaho	127,201	120,947	12,798	14,374	27,172	93,109	172.0	4,813	4,134	2,348	4,280	1,575	9,587,278	7,414,227	5,617,487	
Illinois	1,770,315	1,395,907	153,754	147,365	301,119	1,199,823	189.0	49,024	31,111	18,512	36,965	14,113	153,318,169	123,582,996	79,930,685	
Indiana	783,553	667,379	71,240	72,761	144,001	609,046	170.0	24,158	24,158	10,846	24,024	9,293	62,969,291	55,027,181	34,631,375	
Iowa	614,740	554,655	54,591	62,638	117,229	470,013	174.0	25,027	.....	12,172	21,011	7,634	57,486,002	48,405,000	29,518,788
Kansas	476,464	431,166	43,698	47,912	91,610	366,586	169.0	19,814	.....	11,653	19,704	7,563	42,378,595	38,782,343	22,957,811
Kentucky	753,063	588,354	27,725	34,745	62,470	431,574	168.0	15,323	8,040	10,389	9,185	4,960	22,938,922	19,885,259	14,981,207	
Louisiana	606,318	434,557	25,359	32,484	57,843	344,425	153.3	12,173	10,664	4,370	7,536	2,812	22,822,024	16,514,993	11,448,225	
Maine	195,796	154,445	14,207	15,798	30,005	138,841	178.0	6,191	4,893	1,434	4,603	1,745	11,700,408	10,197,025	5,830,136	
Maryland	402,562	277,459	19,533	22,763	42,296	234,261	187.1	8,622	4,764	1,209	6,012	2,030	25,307,727	18,528,485	12,869,930	
Massachusetts	999,696	770,242	74,549	78,423	152,972	665,937	183.0	26,008	24,455	3,411	24,877	7,678	85,971,158	70,792,177	50,598,015	
Michigan	1,195,057	970,582	83,296	83,931	167,857	922,284	170.0	34,552	.....	17,291	23,201	10,281	119,299,679	97,860,353	56,543,364
Minnesota	657,090	551,741	49,331	49,300	98,631	456,836	178.0	22,169	.....	9,074	16,401	6,717	51,555,155	42,773,955	28,448,090
Mississippi	613,148	594,605	19,764	23,481	43,245	426,619	139.0	16,047	8,500	3,441	7,267	3,634	19,185,279	16,273,543	12,205,157	
Missouri	860,094	656,073	63,719	68,331	132,050	592,244	175.7	24,200	17,272	8,736	17,145	7,414	55,462,083	42,533,469	31,380,241	
Montana	141,349	120,337	11,269	13,518	24,787	102,278	178.7	6,032	5,814	1,612	3,889	1,718	14,969,486	11,916,370	7,331,351	
Nebraska	357,648	325,216	32,037	36,949	68,986	256,095	177.3	15,148	.....	10,059	11,968	3,346	27,120,735	23,464,168	16,321,327
Nevada	19,007	18,041	1,909	1,853	3,762	15,733	170.3	812	.....	387	652	264	2,920,105	2,026,328	1,204,489
New Hampshire	109,241	74,623	6,807	7,351	14,158	66,175	177.9	2,961	2,612	900	2,877	1,401	7,479,661	6,084,888	3,884,445	
New Jersey	905,274	792,012	61,832	58,097	119,929	664,354	188.0	27,181	27,165	7,882	15,348	4,382	116,474,178	92,245,919	59,361,334	
New Mexico	127,324	102,084	5,915	6,672	12,587	76,292	172.0	3,606	.....	1,941	1,403	607	7,128,722	5,898,474	4,149,803
New York	2,792,806	2,141,479	216,079	208,755	424,834	1,866,422	187.5	82,204	.....	16,938	45,404	29,036	358,076,568	279,634,914	186,061,842
North Carolina	1,030,317	866,939	50,793	65,617	116,410	67,043	154.0	23,586	16,102	6,670	15,144	8,650	41,630,401	27,961,532	21,003,641	
North Dakota	204,010	169,279	12,554	17,143	29,697	148,602	165.7	9,110	4,418	2,500	4,995	1,862	16,069,408	14,195,289	7,917,889	
Ohio	1,599,554	1,278,073	129,611	136,110	265,721	1,141,365	179.2	43,263	33,663	10,000	39,400	14,742	145,135,033	112,075,860	71,953,321	
Oklahoma	695,334	682,650	49,162	54,997	104,159	458,154	149.0	19,565	.....	17,464	15,024	6,086	33,547,959	29,539,480	19,355,062
Oregon	214,179	202,595	22,569	25,118	47,687	162,830	174.3	6,961	.....	4,492	7,696	2,707	19,122,514	15,262,775	11,221,668
Pennsylvania	2,549,904	1,948,516	146,337	150,035	296,372	1,658,607	181.5	60,883	56,258	18,663	47,129	20,072	183,242,080	150,298,454	98,628,661	
Rhode Island	169,889	118,704	8,546	8,840	17,386	92,229	195.0	4,488	.....	850	2,385	890	11,731,772	9,533,684	6,447,709
South Carolina	592,047	469,370	24,005	28,882	52,887	348,480	147.0	13,480	.....	1,239	5,400	2,718	16,187,319	14,992,517	10,483,717
South Dakota	195,477	165,624	13,721	17,617	31,338	138,600	178.5	8,943	.....	4,518	5,600	2,343	15,290,474	14,294,439	8,560,210
Tennessee	752,173	651,586	27,898	35,632	63,530	476,749	165.0	19,058	9,715	8,014	8,865	4,362	22,654,557	21,011,631	16,009,262	
Texas	1,627,836	1,308,028	111,955	123,883	235,838	1,025,387	152.9	42,772	.....	29,125	27,737	14,723	78,223,010	55,778,926	39,511,510
Utah	153,686	138,046	16,155	16,462	32,616	120,572	172.5	4,627	.....	2,061	4,949	1,968	12,359,392	9,032,451	6,101,507
Vermont	87,563	65,727	5,871	5,729	11,600	59,166	168.0	2,982	.....	1,448	1,791	710	5,620,736	5,529,870	2,870,628
Virginia	716,448	562,956	26,937	35,756	62,693	446,574	166.3	17,082	.....	9,443	8,651	3,117	23,402,884	20,073,936	14,917,064
Washington	357,028	344,721	41,771	43,657	85,428	279,187	179.0	11,709	11,000	4,096	12,992	5,450	33,245,780	29,585,256	18,213,614	
West Virginia	520,236	395,505	24,692	28,130	52,822	350,169	165.6	18,045	12,266	7,980	7,602	3,742	28,218,896	24,064,685	18,867,501	
Wisconsin	743,844	564,022	50,292	56,045	106,337	473,214	179.2	21,474	14,458	13,911	16,818	6,340	53,670,008	43,125,537	30,915,797	
Wyoming	57,795	54,505	5,031	6,133	11,164	43,822	175.7	2,981	.....	1,115	1,675	509	6,482,118	6,184,261	3,904,305

¹Data from the U. S. Census Bureau.

TABLE II. Census Data, Birth Rates, Per Capita Wealth and Per Capita Costs of Public Schools, 1929-30

State	Total Population ¹	Per Cent of Population 10 Years of Age and Over Illiterate ²	Per Cent of Those Aged 5-20, Inclusive Attending School ²	Per Cent of Population Urban ¹	Per Cent of Population Colored ¹	Per Cent of Population Foreign-Born White ¹	Birth Rate Per 1,000 ¹	Ratio of Those 21 Years of Age and Over to Those 5-17, Inclusive	Per Capita of Population Cost, Public Schools	Per Capita Population Wealth ²	Wealth Back of School Dollar	Per Capita Cost, Public Schools Adjusted to a Standard Population	Per Capita Cost For Each Adult	Per Capita Cost For Each Pupil in Average Daily Attendance
Continental														
United States.....	122,775,046	4.3	69.9	56.2	9.69	10.89	18.9	2.31	\$ 19.55	\$2,977	\$152.28	\$ 19.55	\$ 32.96	\$109.40
Alabama	2,646,248	12.6	62.0	28.1	35.70	0.59	24.0	1.65	8.56	1,264	147.66	11.98	16.80	47.83
Arizona	435,573	10.1	66.8	34.4	2.47	3.58	23.7	2.08	24.92	3,686	147.91	27.68	48.43	142.85
Arkansas	1,854,482	6.8	66.3	20.6	28.50	0.55	22.1	1.73	7.63	1,557	204.06	10.19	14.61	42.20
California	5,677,251	2.6	78.5	73.3	1.43	14.27	14.7	3.39	25.98	3,093	119.05	17.70	38.16	162.28
Colorado	1,035,791	2.8	73.2	50.2	1.14	8.25	18.1	2.39	25.31	3,418	135.04	24.46	42.04	137.43
Connecticut	1,606,903	4.5	72.4	70.4	1.83	23.83	17.1	2.45	22.10	3,890	176.02	20.84	36.03	130.43
Delaware	238,380	4.0	69.2	51.7	13.68	7.08	18.2	2.58	21.98	3,056	139.03	19.68	35.22	140.98
Dist. Columbia ..	486,869	1.6	74.0	100.0	27.13	6.15	19.2	3.88	25.73	3,849	149.59	15.32	36.69	185.73
Florida	1,468,211	7.1	66.2	51.7	29.41	4.02	18.2	2.29	12.62	2,029	160.78	12.73	21.39	69.19
Georgia	2,908,506	9.4	60.4	30.8	36.83	0.48	20.9	1.67	6.35	1,528	240.63	8.78	12.32	34.29
Idaho	445,032	1.1	75.0	29.1	0.15	6.48	20.6	1.94	21.54	4,119	191.23	25.65	38.85	102.97
Illinois	7,630,654	2.4	71.2	73.9	4.31	15.96	16.7	2.73	20.09	4,227	210.40	17.00	31.67	127.78
Indiana	3,238,503	1.7	72.2	55.5	3.46	4.17	18.3	2.56	19.44	3,082	158.54	17.54	31.44	103.39
Iowa	2,470,939	0.8	76.7	39.6	0.70	6.71	17.3	2.45	23.26	4,617	198.50	21.93	38.17	122.31
Kansas	1,880,999	1.2	74.7	38.8	3.53	3.71	17.9	2.37	22.53	3,626	160.94	21.96	37.50	115.60
Kentucky	2,614,589	6.6	64.3	30.6	8.65	0.84	22.6	1.89	8.77	1,536	175.14	10.72	16.13	53.15
Louisiana	2,101,593	13.5	63.2	39.7	36.94	1.66	20.3	1.87	10.86	1,858	171.09	13.42	20.11	66.26
Maine	779,423	2.7	75.0	40.3	0.14	12.88	20.3	2.49	15.01	2,910	193.87	13.92	24.02	84.27
Maryland	1,631,526	3.8	65.7	59.8	16.94	5.83	18.5	2.48	15.51	2,804	180.79	14.45	25.39	108.03
Massachusetts ..	4,249,614	3.5	75.0	90.2	1.23	24.82	17.3	2.69	20.23	3,562	176.07	17.37	32.00	129.10
Michigan	4,842,325	2.0	75.8	68.2	3.50	17.35	20.4	2.46	24.64	2,795	113.43	23.14	40.59	129.35
Minnesota	2,563,953	1.3	74.2	49.0	0.37	15.14	18.5	2.34	20.11	3,731	185.53	19.85	33.52	112.85
Mississippi	2,009,821	13.1	68.7	16.9	50.24	0.35	23.9	1.68	9.55	1,242	130.05	13.13	18.60	44.97
Missouri	3,629,367	2.3	69.4	51.2	6.17	4.12	17.1	2.64	15.28	3,131	204.91	13.37	24.44	93.65
Montana	537,606	1.7	74.6	33.7	0.24	13.57	18.5	2.25	27.84	4,755	170.80	28.58	46.98	146.36
Nebraska	1,377,963	1.2	76.5	35.3	1.00	8.37	19.6	2.27	19.68	4,241	215.50	20.03	33.38	105.90
Nevada	91,058	4.4	74.7	37.8	0.57	13.48	14.6	3.20	32.07	6,318	197.01	23.15	48.03	185.60
New Hampshire...	465,293	2.7	72.7	58.7	0.17	18.12	17.9	2.69	16.08	3,440	213.93	13.81	25.44	113.03
New Jersey	4,041,334	3.8	72.7	82.6	5.17	20.90	16.8	2.55	28.82	3,415	118.49	26.11	46.37	175.32
New Mexico	423,317	13.3	67.1	25.2	0.67	1.84	28.5	1.70	16.84	2,800	166.27	22.88	32.86	93.44
New York	12,588,066	3.7	72.7	83.6	3.28	25.35	17.1	2.92	28.45	3,276	115.17	22.50	43.92	191.85
North Carolina ..	3,170,276	10.0	64.4	25.5	28.98	0.28	24.7	1.50	13.13	1,737	132.29	20.22	27.00	61.76
North Dakota ..	680,845	1.5	71.2	16.6	0.06	15.44	21.6	1.89	23.60	3,803	161.14	28.84	44.86	108.14
Ohio	6,646,697	2.3	73.9	67.8	4.65	9.69	17.7	2.58	21.84	3,250	148.81	19.55	35.12	127.16
Oklahoma	2,396,040	2.8	70.2	34.3	7.19	1.12	16.8	1.85	14.00	1,803	128.78	17.48	26.06	73.22
Oregon	953,786	1.0	75.0	51.3	0.23	11.06	14.1	2.90	20.05	4,084	203.69	15.97	30.77	117.44
Pennsylvania	9,631,350	3.1	69.4	67.8	4.48	12.80	19.8	2.22	19.03	3,425	179.98	19.80	32.39	110.48
Rhode Island....	687,497	4.9	69.7	92.4	1.44	24.83	18.0	2.48	17.06	3,251	190.56	15.89	27.85	127.20
South Carolina ..	1,738,765	14.9	60.1	21.3	45.65	0.30	22.9	1.38	9.31	1,593	171.11	15.58	19.76	46.45
South Dakota ..	692,849	1.2	72.9	18.9	0.09	9.48	....	1.97	22.07	4,964	224.92	25.88	39.63	110.32
Tennessee	2,616,556	7.2	64.4	34.3	18.25	0.50	20.1	1.89	8.66	1,909	220.44	10.58	15.97	47.52
Texas	5,824,715	6.8	61.9	41.0	14.68	1.69	....	1.98	13.43	1,906	141.92	15.67	24.29	76.78
Utah	507,847	1.2	76.8	52.4	0.22	8.62	....	1.72	24.34	3,505	144.00	32.69	46.73	102.51
Vermont	359,611	2.2	70.4	33.0	0.16	11.97	19.3	2.52	15.63	2,637	168.71	14.33	25.50	95.00
Virginia	2,421,851	8.7	62.5	32.4	26.85	0.98	22.6	1.82	9.66	2,347	242.96	12.26	17.99	52.41
Washington	1,563,396	1.0	75.7	56.6	0.44	15.62	14.7	2.83	21.27	3,699	173.90	17.36	32.91	119.08
West Virginia....	1,729,205	4.8	66.6	28.4	6.64	2.98	24.0	1.73	16.32	3,143	192.59	21.77	31.32	80.59
Wisconsin	2,939,006	1.9	74.2	52.9	0.37	13.14	19.3	2.38	18.26	3,073	168.29	17.72	30.34	113.42
Wyoming	225,565	1.6	73.7	31.1	0.55	8.72	19.8	2.30	28.74	4,119	143.32	28.86	48.76	147.94

¹Data from the U. S. Census Bureau.²Data from the National Industrial Conference Board.

5. Per Cent Boys Were of Girls in the High School

This item refers to the ratio between the number of boys enrolled in the last four years of high school to the number of girls so enrolled. If all pupils of high-school age were enrolled, this ratio would be approximately 1, or 100 per cent. In this country the male births outnumber the female births. The constant ratio is about 1,057 male births to 1,000 female births. Death rates are higher at every age for males. An age comes when the sexes are about equal in number. The item, therefore, is supposed to measure the holding power of the schools, for boys.

6. Average Expenditure for Each Child Attending

Total expenditures, excluding payments on bonds, payments into sinking funds, and balances on hand, are used. The total cost, therefore, includes instruction costs, maintenance, fixed charges, capital costs, interest on borrowings, and overhead or administrative costs.

7. Average Expenditure Per Child of School Age

Total cost as outlined in the foregoing, divided by the number of children of ages 5 to 17, inclusive.

8. Average Expenditure Per Teacher Employed

Total costs again, divided by the number of teaching positions plus the number of principals and supervisors.

9. Average Expenditure Per Pupil for Expenses Other Than Salaries

That is, the total cost, less expenditures for salaries, divided by the number of children of ages 5 to 17, inclusive.

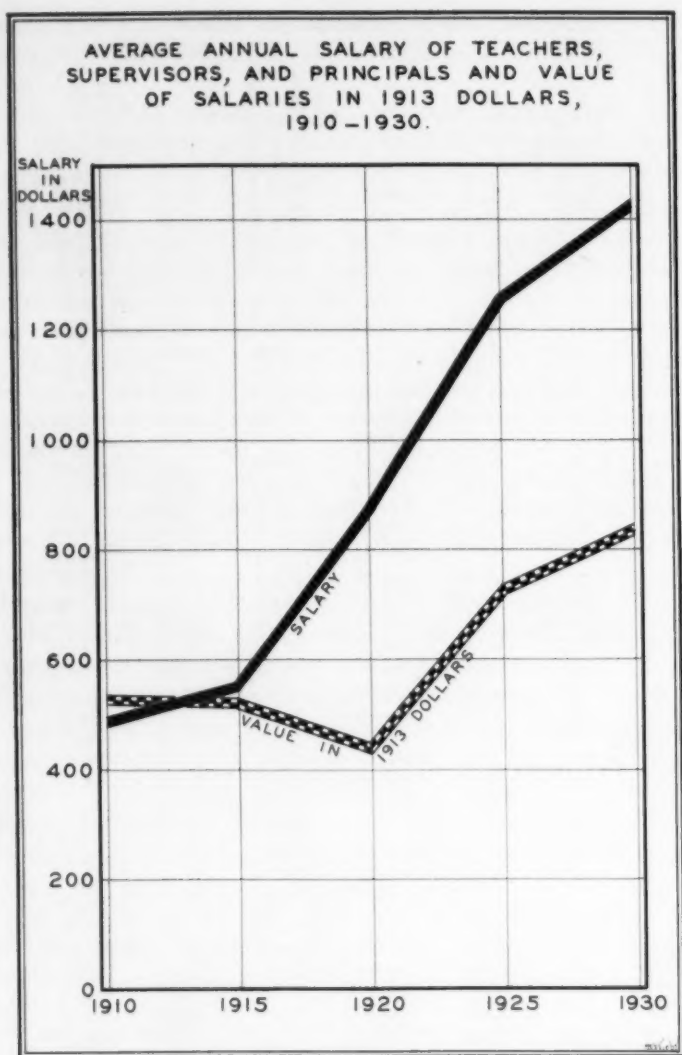
10. Expenditure Per Teacher for Salaries

Salary costs for teachers, principals, and supervisors, divided by the number of such employees.

11. Illiteracy

These data are collected every ten years by the United States Census Bureau in a uniform manner. The figures need to serve for ten years, or until a new census is taken. Their use as an element of state ranks in education has been questioned. Some would substitute the per capita amount expended by a state for the eradication of illiteracy. No complete and accurate data are available upon state appropriations of this nature. Those states with the lowest rate of illiteracy (many of them) have spent no money directly for the eradication of illiteracy. True, their expenditures for public education help to reduce this item. Their payments for night schools, especially for adult education, are more direct, but no data are available to show how many illiterates take advantage of the opportunities offered in these extra classes.

Again it is said that the foreign elements and the colored portions of the population determine the amount of illiteracy. The 1930 rate of illiteracy for native whites with native parents is 2.5 per cent; for native whites with foreign or mixed parents is 0.8 per cent; for foreign-born whites, 13.1 per cent; for Negroes, 22.9 per cent; and for other races, 25.6 per cent. The rate for the United States was 20.0 per cent in 1870; 17.0, in 1880; 13.3, in 1890; 10.7, in 1900; 7.7, in 1910; 6.0, in 1920; and 4.3 per cent in 1930. At this rate of decrease, illiteracy should become a negligible factor in most parts of this country by 1970.



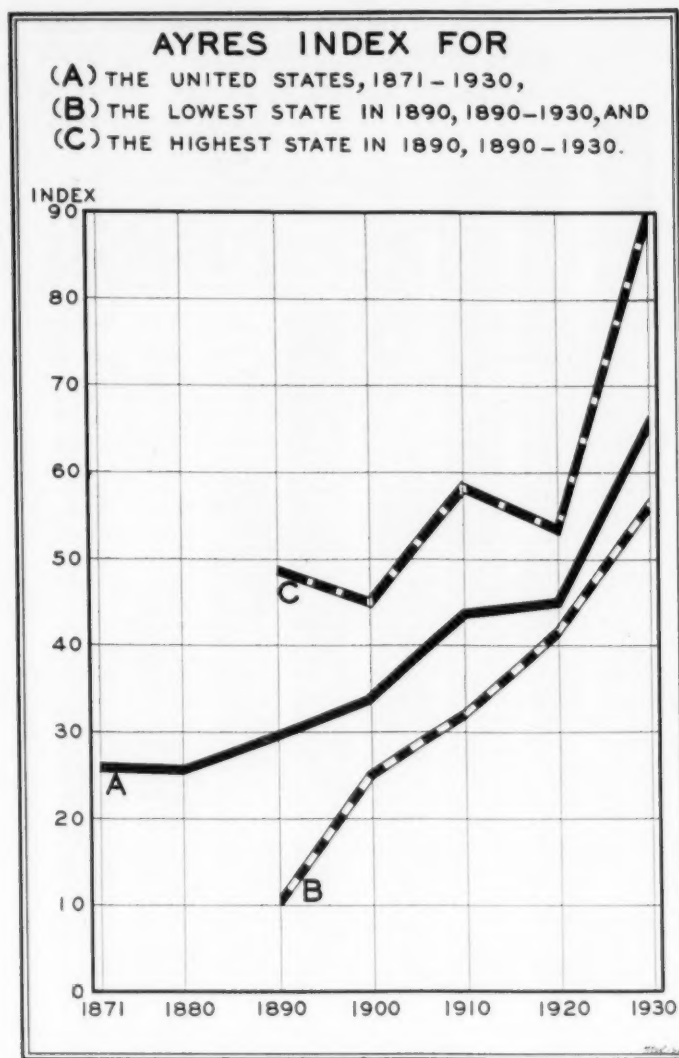
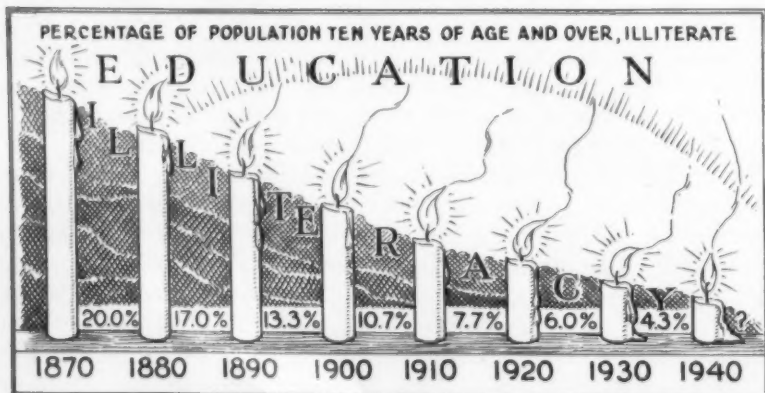
12. Per Cent of High-School Graduates Continuing Their Education

In the 1930 ranks data were used for 1930 where available, for 1929 in a few instances, and upon rare occasions for 1928. It is assumed that the rates for this item do not change materially within the short space of two years. It is not certain, however, that local superintendents are able to report this item with the same degree of accuracy that they do financial items, or other personnel items.

13. Ratio of Teacher Training Students to Teaching Positions

This item had immense value at one time. In this day of an apparent oversupply of teachers in some localities, and in some subjects, it has doubtful value. Some teacher-training institutions, with their revival meeting methods of "come one, come all," in their solicitation of students, have been accused not only of overcrowding the waiting line of teacher vacancies, but of certifying some who are not endowed with those qualities that go with good teaching. It is hardly valid to give a state extra credit for training 75 teachers annually for classes in home economics for which not more than 15 vacancies are likely to occur. This training is not detrimental to the student, but as a prospective teacher she adds to an oversupply, and her training is not a matter of economy on the part of the state.

For the 1930 rankings, the writer sought to secure a statement of the number of teachers employed who had at least two years of training beyond high-school graduation. Data were available for about one half of the states. This item, therefore, is used for 24 states, and the ratio of students to teachers for the others, and the splicing together of



these two sets of data is done arbitrarily. Further discussion of this item is included under Section III of this report.

The data in Tables I and II are used according to the methods in-

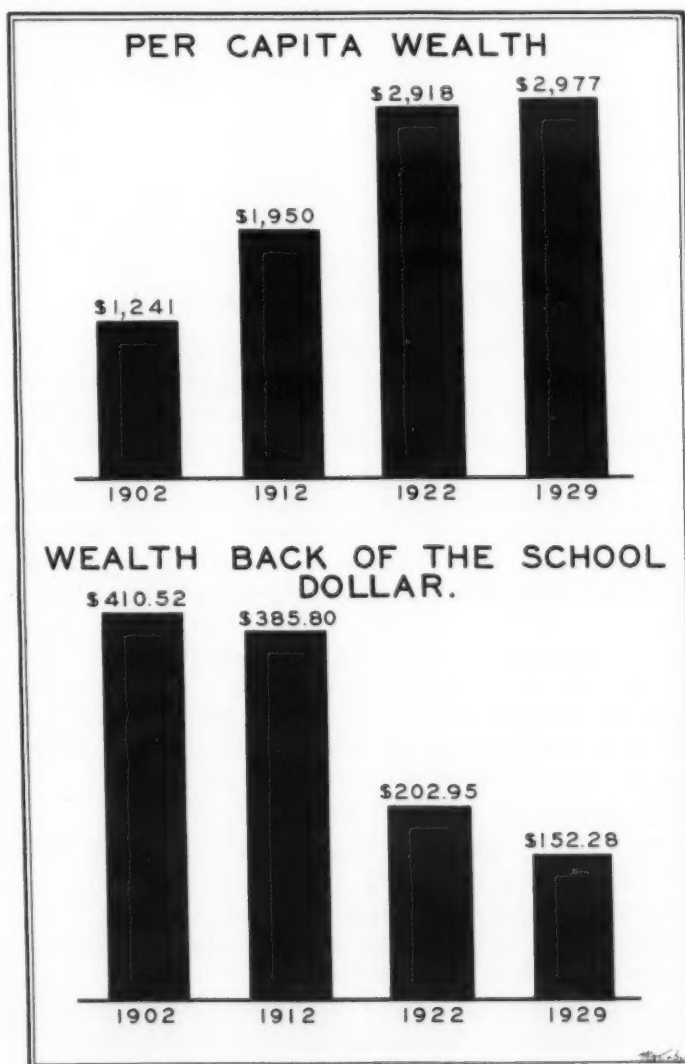


TABLE III. Educational Rank of States, Ayres Method, 1930

States	Per Cent of School Population 5-17 Years of Age, Inclusive, in Daily Attendance	Average Days Attended by each Child 5-17 years of Age, Inclusive	Average Number of Days Schools Were in Session	Per Cent High-School Enrollment is of Total Enrollment	Per Cent Boys Were of Girls in High School	Average Expenditure Per Child Attending	Average Expenditure Per Child of School Age	Average Expenditure Per Teacher Employed	Expenditure Per Pupil for Purposes Other Than Teachers' Salaries	Expenditure per Teacher for Salaries	Revised Index for 1930	Rank for 1930
1	2	3	4	5	6	7	8	9	10	11	12	
United States	67.35	58.03	86.13	51.00	92.99	63.98	43.09	64.00	58.62	69.36	65.46	
Alabama	57.94	43.46	75.00	29.40	83.26	27.97	16.21	32.63	22.94	38.50	42.73	45
Arizona	64.82	56.75	87.55	44.10	100.59	83.54	54.15	74.85	76.96	80.75	72.41	13
Arkansas	59.86	44.06	73.60	30.15	86.40	24.68	14.77	32.23	18.28	40.58	42.46	46
California	80.12	73.88	90.55	65.13	98.51	94.90	75.70	86.80	80.62	99.57	84.58	4
Colorado	73.15	65.84	90.00	50.52	90.85	80.37	58.79	65.10	71.58	72.21	71.84	14
Connecticut	67.61	62.61	92.00	55.74	90.05	76.27	51.57	79.81	68.16	88.30	73.21	11
Delaware	64.52	57.59	89.25	48.72	85.33	82.44	53.19	87.04	92.40	76.53	73.70	10
District of Columbia...	76.56	67.30	87.90	60.75	94.44	108.61	83.16	104.40	106.28	106.65	89.60	2
Florida	70.76	54.49	77.00	39.15	83.50	40.46	28.63	40.46	39.24	41.68	51.54	39
Georgia	60.16	44.52	74.00	34.65	75.24	20.05	12.06	22.81	11.56	32.47	38.75	49
Idaho	73.20	62.95	86.00	65.41	89.04	60.22	44.08	48.54	49.87	56.88	63.62	28
Illinois	67.77	64.05	94.50	64.71	104.34	74.73	50.65	76.20	71.54	79.46	74.80	6
Indiana	77.73	66.07	85.00	64.74	97.91	60.46	46.99	63.52	54.42	69.81	68.67	20
Iowa	76.46	66.52	87.00	63.42	87.15	71.53	54.68	55.97	69.59	57.48	68.98	19
Kansas	76.94	65.02	84.50	63.75	91.20	67.60	52.01	52.12	61.96	57.74	67.28	22
Kentucky	57.31	48.14	84.00	31.86	79.80	31.08	17.81	36.48	21.57	47.64	45.57	42
Louisiana	56.81	43.54	76.65	36.60	78.07	38.75	22.01	45.68	38.62	45.83	48.26	41
Maine	70.91	63.11	89.00	58.29	89.93	49.28	34.95	46.05	49.45	45.89	59.69	34
Maryland	58.19	54.44	93.55	44.20	85.81	63.18	36.77	71.52	62.09	72.74	64.25	27
Massachusetts	66.61	60.95	91.50	59.58	95.06	75.50	50.29	80.54	62.13	94.81	73.70	9
Michigan	77.18	65.60	85.00	51.87	99.97	75.64	58.38	39.87	79.58	79.75	71.28	16
Minnesota	69.52	61.88	89.00	53.64	100.06	65.99	45.85	56.67	59.16	62.54	66.43	23
Mississippi	69.58	48.36	69.50	21.81	84.17	26.30	18.30	29.13	19.13	37.06	42.33	47
Missouri	68.86	60.49	87.85	60.39	93.25	54.77	37.71	55.84	47.55	63.19	62.79	29
Montana	72.36	64.66	89.35	61.80	83.36	85.59	61.93	60.47	87.35	59.23	72.61	12
Nebraska	71.61	63.48	88.65	63.63	86.71	61.93	44.34	43.63	49.32	52.51	62.58	30
Nevada	82.77	70.48	85.15	62.65	103.02	108.54	89.84	87.63	127.54	72.29	88.99	3
New Hampshire	60.58	53.87	88.93	56.91	92.60	61.10	40.04	61.55	63.54	63.93	64.31	26
New Jersey	67.43	63.39	94.00	45.42	106.43	102.53	69.13	104.42	68.97	106.43	82.82	5
New Mexico	59.92	51.53	86.00	36.99	88.65	54.64	32.74	48.17	45.67	56.08	56.04	35
New York	66.83	62.66	93.75	59.52	103.51	112.19	74.98	106.14	107.79	110.30	89.77	1
North Carolina	65.42	50.38	77.00	36.93	77.41	36.12	23.63	42.65	35.79	43.04	48.84	40
North Dakota	72.84	60.35	82.85	52.62	73.23	63.24	46.06	42.98	64.18	42.36	60.07	33
Ohio	71.36	63.94	89.60	62.37	95.23	74.36	53.06	81.74	74.95	81.05	74.77	7
Oklahoma	65.89	49.09	74.50	45.78	89.39	42.82	28.22	41.78	36.23	48.21	52.19	38
Oregon	76.03	66.26	87.15	70.62	89.85	68.68	52.21	66.94	56.75	78.56	71.31	15
Pennsylvania	65.05	59.03	90.75	45.62	97.54	64.61	42.02	73.33	59.66	78.94	67.66	21
Rhode Island	54.29	52.93	97.50	43.95	96.67	74.39	40.39	63.90	67.01	70.01	66.10	24
South Carolina	58.86	43.26	73.50	30.99	83.11	27.16	15.99	29.26	19.15	37.90	41.92	48
South Dakota	70.90	63.28	89.25	56.76	77.88	64.52	45.74	41.66	56.80	46.65	61.34	31
Tennessee	63.38	52.29	82.50	29.25	78.29	27.79	17.61	28.97	16.30	40.94	43.73	44
Texas	62.99	48.16	76.45	49.58	90.37	44.90	28.10	44.56	44.15	45.01	53.43	36
Utah	78.45	67.67	86.25	70.89	98.14	59.94	47.03	65.09	60.70	64.26	69.84	18
Vermont	67.57	56.76	84.00	52.95	102.48	55.56	37.54	45.93	54.36	46.91	60.41	32
Virginia	62.33	51.83	83.15	31.19	75.34	30.65	19.11	33.38	22.22	42.56	45.18	43
Washington	78.20	69.99	89.50	74.34	95.58	69.64	54.46	69.19	62.97	75.81	73.98	8
West Virginia	67.31	55.73	82.80	40.08	87.78	47.13	31.72	38.10	31.24	50.95	53.28	37
Wisconsin	63.62	57.00	89.60	56.55	89.74	66.33	42.19	60.90	56.23	70.16	65.23	25
Wyoming	75.82	66.69	87.85	61.44	82.03	86.52	65.60	53.01	68.83	63.83	71.16	17

dictated to secure the state index numbers included in Table III. From the state indexes included in column 11, the state ranks included in column 12 are made. New York leads in 1930 with an index of 89.77, which is 37 per cent higher than the index for the United States as a whole. The District of Columbia ranks second with an index of 89.60; then Nevada with 88.99; California is fourth with 84.58; New Jersey fifth with 82.82; Illinois sixth with 74.80; Ohio seventh with 74.77; Washington eighth with 73.98; Massachusetts ninth with 73.70; and Delaware is tenth with an index of 73.70 also.

Compaction of the population has its influence upon the cost of running the schools. Some may wish to compare the state index with some measure of the manner in which the population is held together in groups. While the distinction between urban and rural peoples may not be uniform for different localities, it seems best to use the census measure of the distribution of the population according to this criterion. The states, therefore, are arranged according to the portion of persons in urban groups. The District of Columbia naturally leads with 100 per cent of its population in the city—that is, in urban territory. It has an educational index for 1930 of 89.60. Those states with more than two thirds of the population urban follow:

State	Per Cent Urban	Index	State	Per Cent Urban	Index
Rhode Island	92.4	66.10	California	73.3	84.58
Massachusetts	90.2	73.70	Connecticut	70.4	73.21
New York	83.6	89.77	Michigan	68.2	71.28
New Jersey	82.6	82.82	Ohio	67.8	74.77
Illinois	73.9	74.80	Pennsylvania	67.8	67.66

States with between one half and two thirds of the population urban follow:

State	Per Cent Urban	Index	State	Per Cent Urban	Index
Maryland	59.8	64.25	Florida	51.7	51.54
New Hampshire	58.7	64.31	Delaware	51.7	73.70
Washington	56.6	73.98	Oregon	51.3	71.31
Indiana	55.5	68.67	Missouri	51.2	62.79
Wisconsin	52.9	65.23	Colorado	50.2	71.84
Utah	52.4	69.84			

States with between one third and one half of the population urban follow:

State	Per Cent Urban	Index	State	Per Cent Urban	Index
Minnesota	49.0	66.43	Nevada	37.8	88.99
Texas	41.0	53.43	Nebraska	35.3	62.58
Maine	40.3	59.69	Arizona	34.4	72.41
Louisiana	39.7	48.26	Oklahoma	34.3	52.19
Iowa	39.6	68.98	Tennessee	34.3	43.73
Kansas	38.8	67.28	Montana	33.7	72.61

Lastly, states with less than one third of the population urban follow:

State	Per Cent Urban	Index	State	Per Cent Urban	Index
Vermont	33.0	60.41	North Carolina	25.5	48.84
Virginia	32.4	45.18	New Mexico	25.2	56.04
Wyoming	31.1	71.16	South Carolina	21.3	41.92
Georgia	30.8	38.75	Arkansas	20.6	42.46
Kentucky	30.6	45.57	South Dakota	18.9	61.34
Idaho	29.1	63.62	Mississippi	16.9	42.33
West Virginia	28.4	53.28	North Dakota	16.6	60.07
Alabama	28.1	42.73			

(Continued in March)

Possible Economies in School Administration

W. E. Sheffer, Superintendent of Schools, Manhattan, Kansas

Present-day economic conditions and the historic attitude toward popular education justify the acceptance of two assumptions in any consideration of economies in education at the present time. The first is that expenditures must be reduced. The decrease in the prices of commodities, wages, salaries, and incomes in general has necessitated this. The second is that the schools should not be required to suffer unnecessarily, since they could not serve their high purpose.

The present state of public mind, however, demands that those intrusted with the administration of the schools must be clear in thinking, sympathetic in feeling, and courageous in action, or in the effecting of economies in the quality of education provided for the children. It must not deteriorate below a point which will make for either present or future well-being. As a people, we can safely reduce the quality and quantity of many of the commodities and services which we purchase to satisfy our personal and national wants. When days of prosperity return — and they will return — we can go back to our former scale of living, but a year spent by the children of the nation in inferior schools will produce results of an irreparable nature.

In considering economies in education, it behooves us to keep in mind that we are dealing with a matter which is fundamental to the permanent welfare of the nation. It is wise to call attention to the fact that, while many citizens may think that public schools are supported for personal aggrandizement to enable boys and girls to learn how to make more money, with a less expenditure of time and energy, public schools are not maintained for any such purpose. The true reason for their existence is that in, and by, them clear-thinking, loyal citizens, capable of contributing to the material and spiritual progress of the nation, may be developed.

Thoughtful Analysis

I would not intimate that expenditures cannot be reduced, without affecting adversely the quality and quantity of education provided for our children. By careful and judicious planning very material savings can be brought about, without handicapping the children of the state. To do so, however, requires a thoughtful and thoroughgoing analysis of the nature and purpose of all activities which involve the collection and expenditure of money. These may be classified under the five following topics:

1. The management of money itself.
2. The purchase and utilization of materials.
3. The purchase of protection for property.
4. The management of indebtedness.
5. The organization of schools and the direction of personnel.

In each of these five divisions waste can, and does, all too frequently occur. For our purpose we shall regard waste as belonging to one, or both, of two classes, conscious waste and unconscious waste. By conscious waste I mean those types of waste which are caused by the careless use of a material or service to achieve the desired result. For instance, the burning of electric lights in unused corridors and classrooms, the waste caused by open water faucets, and the use of only one side of a sheet of paper. Anyone can add to this list of examples indefinitely. By unconscious waste I mean those wastes which are not so much the result of carelessness as a lack of clear-cut intelligent management. Other examples would be: paying 8 per cent for borrowed money when it might be had for 6 per cent; the maintenance of two sections of a class when one would meet



W. E. SHEFFER

all necessary needs; or the purchasing of supplies at retail rather than wholesale.

Let us consider each of these five types of activities involving money, in an endeavor to determine in what manner conscious or unconscious wastes may be prevented. The management of money is listed first. Economies can be effected a number of ways in the care of the school's money itself. The first essential requisite for doing so is the adoption and use of an effective accounting system which will readily reveal the source of every dollar received and the purpose for which it is expended.

Moreover, an accounting system should classify expenditures in such a manner that valid comparisons can be made among different schools. The desirability of this is so self-evident that it appears like a waste of time to discuss it, yet in many districts the only financial records are warrant stubs and canceled warrants. In the first community in which I served as superintendent, expenditures amounted to some \$45,000 and yet, the records were merely such as described above.

Effective System of Budgeting

A second element in the proper management of money is an effective system of budgeting to actually control expenditures, and not merely to meet a legal requirement. The budget should be prepared by the employed executive of the board of education, then carefully scrutinized by the board, and after desirable changes have been made, adopted by the board. After it has been so adopted, then it should be religiously adhered to.

As the year's financial transactions begin with the adoption of a budget, so they should close with an audit made by a disinterested certified public accountant whose findings should be published. Perhaps no other two single acts of a board of education in the management of the district's finances will make for economy and engender the confidence of the public so effectively as the control of expenditures by a budget and an annual audit.

Economies may be effected through the transfer of funds from the county treasurer to the board of education as soon as they become available. By doing so, interest on daily balances will accrue to the advantage of the board, and frequently the board will avoid borrowing money for current expenses. At times, funds lie with the county treasurer for long periods after they become due to the board of education. School money can be made to do more work if daily balances draw the highest rate of in-

terest obtainable. So also, costs may be reduced by paying the lowest rate of interest on short-term loans. Many school districts pay 6 per cent on such loans, while others pay as high as 8 per cent.

An Accurate Annual Census

The last method of effecting economies in the management of school money is that of having an accurate census taken annually. Since the state school fund yields about \$1 for each child on the census roll, it is worth while to see to it that every child it accounted for.

In the purchase and utilization of materials suggestions can be made which are helpful in producing economies. They are: (1) The proper quality for the purpose to be served must be determined. This means the definite formulation of specifications. (2) The proper quantity of materials to be used must be known. (3) Proper purchasing methods should be followed. (4) Deliveries should be checked. (5) Proper storage and distribution should be made. (6) Proper records of supplies on hand and their location should be kept. (7) The utilization of materials should be supervised so that waste will not occur. Now let us consider some of these generalizations briefly.

Proper quality must be determined. Waste can occur either through the use of materials inferior for the purpose to be served, or better than are required. For instance, paying for leather-bound diplomas when fully satisfactory ones may be had in lodestone cover. Or, using one kind of coal which, heating value considered, costs 48 per cent more than another kind. Or, spending \$200,000 for a palatial, luxurious building when \$150,000 would provide a fully adequate structure.

The determination of a sufficient quantity of materials is essential to economical administration. This is a matter which has been given altogether too little attention. There should be standardization of amounts of various materials purchased on a unit basis, so many reams of test paper per one hundred children, so many paper towels per child, so much sweeping compound per room, etc. Some teachers and custodians will use several times as large a quantity of supplies as others, without doing any better work. Many schools are at fault in this matter. A few, however, have developed their standard allowances very satisfactorily.

Judicious Buying

Marked savings can be effected by following businesslike procedures in making actual purchases. Whereas business organizations take advantage of wholesale buying, many schools buy at retail with markedly higher costs. In larger schools, supply needs for an entire year can be grouped and purchased at one time. Actual savings effected in this manner are highly desirable. Just recently through the coöperation of the clerk of a rural board, I was able to compare prices paid by the rural school in small quantities for identical materials, and the prices our board of education paid when buying goods on one bill costing about \$500. The contrast in prices is rather enlightening. For instance, the same paper fasteners cost the rural school 75 per cent more; thumbtacks, 30 per cent more; theme paper, 25 per cent more; colored pencils, 40 per cent more; hektograph paper, 100 per cent more, and carbon paper, 177 per cent more.

Purchases should be made through open bidding. Several years ago, our board saved approximately \$150 on a bill amounting to about \$550 by submitting the annual supply list to several jobbers. This year the high and low

bids on certain supplies were \$333.89 and \$293.59 respectively, or a difference of 13 per cent. Several years ago, when it was necessary to exchange a number of used typewriters and to purchase several new ones, through dealing with only one of several companies the cost for 25 machines would have been approximately \$1,000. When the purchases were made by open bidding, bids were submitted on equally desirable machines, ranging from \$380 to \$500. Needless to say, the board let the contract to the company bidding \$380 and thereby saved 31 per cent.

Frequently, economies can be effected by purchasing the same article in one type, or size, of container rather than in another. In our schools we use 40 to 50 gallons of paste a year. In securing quotations on the paste last spring the company submitted a price of \$1 a gallon in gallon pails by the dozen. After additional correspondence it gave us a price of 70 cents a gallon in five-gallon tubs, representing a saving of 43 per cent. By purchasing our type-writing and duplicating paper in ton lots, 17 by 22 in. in size, and cutting it to 8½ by 11 in. we obtained a price of 25 cents a ream, instead of the retail price of 60 cents.

Consideration should be given to the purchase of substitutes fully adequate for the purpose to be served. Until recently our board had been buying a certain grade of construction paper which for this year would have cost \$89.64. By carefully checking quality against actual needs we found that satisfactory paper could be purchased for \$65.55. This was bought at a saving of 37 per cent. Mimeograph paper costs 28 cents a ream. For most purposes print paper costing 18 cents a ream serves satisfactorily. Hence, we use the print paper for such purposes. In this regard it might be said that we buy side-run print paper from our local printer for 4½ cents a pound, instead of 6¼ cents from a supply house.

Centralizing Authority in Buying

The authority for purchases should be centralized. The board of education should directly authorize only one person to be responsible for the buying. If the board employs a superintendent, he can well be made the purchasing agent. Where there is no superintendent, the clerk might be granted this authority and responsibility. Then this duly authorized agent should be held strictly accountable for the economical purchase, delivery, and accounting of all materials bought. He should develop and use a system of requisitions and purchase orders which show the authority for every single purchase, the purpose for which it is to be used, and the date of its receipt.

This kind of provision will eliminate promiscuous buying by all members of the school organization, including principals, teachers, janitors, and the superintendent, without any effective check whatever. Such a condition exists in altogether too many communities at the present time.

School boards may save money by taking advantage of discounts offered for early payment. In preparing bills to be presented to our board for payment recently, our clerk consulted me about a bill amounting to \$130. In fine letters on the invoice was the statement "2 per cent discount if paid before the tenth of the month following date of purchase." Naturally the warrant has been drawn for \$127.40 instead of for \$130. May I say in this regard that, if the clerk of the board and the superintendent's secretary in schools large enough to employ a secretary is the same person, economies result not only in reduced salaries, but in greater effectiveness in purchasing and accounting. May I add further that, if you now have separate persons serving as clerk and secretary, the average superintendent will not suggest a

Check List to be Used in Detecting Possible Economies in School Administration-1931-32

I. Finances:

- 1. Does the accounting system readily reveal the cause for the expenditure of every dollar?
- 2. Does the accounting system readily reveal the source of every dollar received?
- 3. Are the subdivisions of the budget properly proportioned?
- 4. Is an annual audit by certified accountants made and the findings published?
- 5. Are all monies received by the board of education as soon as due?
- 6. Does the board of education receive money from all sources to which it is entitled?
- 7. Does the board of education receive a maximum interest rate on its daily balances?
- 8. Does the board of education pay a minimum rate of interest on short-term loans?
- 9. Does the budget merely meet technical legal requirements or is it used as an instrument of economical and efficient administration?
- 10. Does the clerk report to the board of education each month the unencumbered balances under each heading of the budget?
- 11. Is the depository for the funds of the board of education bonded?
- 12. Is the depository for student funds bonded?
- 13. Are board and student funds which are kept in the offices protected in insured vaults?
- 14. Is a periodic investigation made to determine that the levy has been properly made?
- 15. Is the levy sufficiently high to avoid undue borrowing on short-term loans?
- 16. Is the school census carefully taken so that the district receives its full share of state funds?
- 17. Are outstanding bonds drawing the lowest obtainable rate of interest?

II. The Purchase and Utilization of Materials:

- 1. Is the proper quality of materials purchased—neither inferior nor superior—better than required—for effective results?
- 2. Are the proper quantities purchased, neither too little nor too much?
- 3. Have standards of consumption been determined?
- 4. Are economical purchasing methods employed?
 - a) Are materials purchased at wholesale?
 - b) If the school is small, are purchases made by a group of schools?
 - c) Are materials purchased through open bidding?
 - d) Are substitute materials of satisfactory quality but lower cost purchased?

- e) Are materials after being purchased properly stored and accounted for?
- f) Is one person only duly authorized to make and control purchases?

III. Purchase of Protection for Property:

- 1. Are boilers insured?
- 2. Is burglary insurance carried?
- 3. Is fire insurance carried in adequate amounts?
- 4. Is windstorm insurance carried in adequate amounts?
- 5. Have the buildings been appraised recently?
- 6. Are the buildings insured with the recent appraisals as the basis?
- 7. Have the buildings been carefully inspected in an effort to determine possible alterations which, if made, would reduce the rates?
- 8. If any such possible changes have been discovered, have they been made?
- 9. Has advantage been taken of the co-insurance clause?
- 10. Has advantage been taken of the five-year rate?
- 11. Are rates checked at least annually?
- 12. Are new appraisals made when changes take place in construction costs?
- 13. Do all premiums fall due at the same time?
- 14. Are the policies so arranged that one fifth of the premiums become due each year?

IV. Management of Indebtedness:

- 1. Are bonds drawing the lowest obtainable rate of interest?
- 2. Is the rate of interest on money borrowed for current expenses as low as obtainable?
- 3. Does the date for paying principal and interest coincide with the tax-receiving time of year?

V. Organization and the Direction of Personnel:

- 1. Is the district large enough and are there a sufficient number of children to make possible the economical maintenance of a school system?
- 2. Is the number of pupils assigned to each teacher large enough to permit the maintenance of an economical organization and small enough to make possible effective teaching?
- 3. Are members of the custodial force capable of making minor repairs?
- 4. Are capable members of the custodial force retained during the summer to make necessary repairs?

VI. Miscellaneous:

- 1. Have expenditures for extracurricular activities been scrutinized and found justifiable?
- 2. Has a cooperative spirit for effecting economies been developed in pupils, principals, and custodians?
- 3. Are repairs to equipment and buildings made when they can be effected most economically?

change, although he may feel that one person serving in both capacities would be best. In such cases the initiative must come from the members of the board of education.

If the greatest economies are to result, materials after being purchased must be properly stored and accounted for. It is surprising the waste which frequently occurs because of loss in storage. It is not too much to say that in many schools a close inspection would reveal supplies and equipment needed in the schools now lying in closets, storerooms, basements, and attics, unknown to those who should be responsible for them.

The Item of Insurance

Under the head of "purchase of protection for property" reference is made to insurance. When the property is fully protected, at least four kinds of insurance are carried; boiler, burglary, fire, and windstorm. The greatest value of boiler insurance is perhaps the inspection service which underwriting companies furn-

ish. Burglary insurance is desirable, because in every school are carried some funds either of the board of education, of student activities, or both. These should be protected.

It is in the purchase of fire and windstorm protection that the greatest economies can be effected. In attempting to obtain the most protection for the least money, a board of education should first have its property appraised by competent men. It should then ask the state insurance department to recommend ways to reduce the rate to a minimum.

It should next determine what term is the most advantageous for the policies, and finally it should decide whether it is wise to take advantage of the coinsurance clause. Local contractors will ordinarily be willing to appraise the buildings, and their findings usually will be acceptable to the insurance companies. The state insurance department is helpful in recommending changes in buildings which, if made, will reduce the rates. Such changes may in-

(Concluded on Page 90)

Clearfield's School Adventures

Mark Wright, Member, Clearfield Board of Education

This Ph. D. Alarm

A Ph.D. person was elected recently a member of our Clearfield board of education. Since his two small daughters are members of our school system, he was, of course, a logical candidate. The fact that he is professor of college physics in an institution in our next-door-neighbor city only added in the thinking of many to his desirability. The idea apparently being that as the liberal-arts colleges are administered so should our public schools be operated. His very candidacy also ignored entirely the frequently demonstrated efficiency of a lay board of education with an elected professional executive.

Certainly his somewhat active personal campaign for election stressed his experience as a college teacher as well as his long years of training. Everyone seemed to forget that nine tenths of his training had been in the field of physics rather than in that of educational administration. The existence of his doctor's degree and his college position was never allowed to be forgotten. When calling his neighbors on the telephone to ask for support at the polls, he never failed to announce himself as "Professor" or "Doctor." The "doctor" idea became so prominent in the minds of voters generally that one of the leaders of the opposite political party encouraged a somewhat uncouth voter from a neighboring street to visit the doctor-professor with the purpose of securing for local publication the learned one's list of symptoms of infantile paralysis, an epidemic of which was raging at the time.

Such incidents served only to increase an already strong determination. Having won the election, the dominant purpose of the professor began to appear at the very first meeting of the board after election day. He inquired naively at this meeting as to whether or not the superintendent of schools had possessed himself of a doctor's degree. When informed that the superintendent of schools boasted only a master's degree in educational administration, the professor asked even more naively whether the superintendent purposed completing the necessary research for the doctor's degree in the near future.

Sam Jones, chairman of our board, as the worthy "doctor" member would have said, "became incensed increasingly" as he thought about the incident after the meeting. He decided to get a statement from his personal friend, the superintendent of schools in a neighboring city, as to the worth of and necessity for the doctor's degree, especially as applied to a public-school superintendency. This step was taken, Chairman Jones explained to a few of us afterwards, in the same spirit as that with which Canada passed her recent tariff law—not at all in retaliation, but rather in a spirit of flattering imitation. The "doctor" seemed to desire research. Then research he should have—at least to the extent of securing the mature judgment of an experienced superintendent of schools whose statements on public-school affairs were everywhere granted the respect they merited.

This superintendent's report served as an excellent climax to the entire discussion so far as our board of education is concerned. Any further mention of the matter in a future board meeting will precipitate an embarrassing anticlimax. The report as read by Chairman Jones last month is quoted in full herewith:

"Your inquiry about the desirability and value of the doctor's degree for public-school superintendents is very timely. Because the

colleges of our land require that college teachers be Ph.D's, the general impression is abroad that a doctor's degree is essential to educational leadership anywhere. We are told that American business is suffering just now from too much mass production. Possibly public education also is suffering from too much mass production of Ph.D's, many of which do not stand up under wear.

"The Ph.D. signifies a certain accomplishment in research. No more than just that. The candidate for a doctor's degree may be a blank cartridge so far as general qualities of community and educational leadership are concerned, but still receive the coveted degree if his little piece of research is deemed to be adequate. Too much emphasis in the game of degree chasing is placed on research so far as preparation for the school superintendency is concerned. The school superintendent needs to keep close to the issues of life and of his community. Wisdom as much as knowledge is the prime requisite of any successful community leadership. If there is any connection between such leadership and the type of research required for a doctor's degree, it is largely accidental."

"Worse," says Prof. Knight of Columbia University (himself a Ph.D.), "when the Ph.D. virus gets into a young man's blood, it is likely to ruin him for life. The medieval system of

producing Ph.D's leads the hapless victim to believe that he is flying to the world with an important message. His professors, themselves infected with the virus, assure him that his message is important. Thus the young man falls into the error of taking himself seriously. With his Ph.D. written in bold type after his name he enters upon the responsibility of the school superintendency with the thought that he is quite an important person."

Every such important person should reread the reply of Will Rogers to Oklahoma City University, when that institution desired to give him an honorary degree. He declined the favor in these words: "What are you trying to do? Make a joke out of college degrees? They are in bad enough repute as it is without handing 'em around to comedians. The whole honorary-degree thing is the hooey!"

And so is Ph.D. research as a guarantee of successful leadership in any school superintendency. Research is a highly specialized and usually narrowing process. It requires ability to collect material with care and to arrange it with exactness. But the gaining of a background for leadership in the public-school superintendency requires more than this type of research. Such leadership does not depend upon being able to pass academic examinations. Rather it depends upon many first-hand community contacts; on fellowship with business men; on first-hand acquaintance with school and classroom problems; on understanding of the problems and attitudes of both parents and children; on "living" in a community. In short, educational leadership results, not from research, but from a way of living.



Two Needs Can Be Served at Once!

Cooperation for Administrative Efficiency

The Relationship of Board of Education and Superintendent in the Activities of Organization and Administration of Schools

J. Paul Gardner, Principal of High School, Metcalf, Ill.

Many of the difficulties and dissatisfactions between school-board members and superintendents can be traced to misunderstandings arising from an interpretation of the powers and duties. Such troubles arise when responsibility is delegated without the necessary authority or power. General comments of superintendents indicate that there have never been any policies determined by which the superintendent may carry on the functions of organization, administration, and supervision. On the other side of the question is the feeling that the superintendent is inclined to get puffed up over his position and to assume too much authority. However, such a chaotic state of mind on the part of both board members and superintendents does not lend itself to unified purposes and the cooperative spirit essential for efficient operation of the schools.

The Superintendent's Authority

By law, the superintendent has no authority. Such authority as he may have is delegated to him by the board of education. His duties and responsibilities are great, hence, unless he is recognized as the chief executive of the board of education, with consequent delegation of authority, he is superintendent only in title. As such, regardless of his training and ability, he is bound to be ineffective in the proper administration of the position for which he is employed. Therefore, we shall proceed to set up definite policies for guidance in activity analysis; second, to analyze each activity and, using the policies set up as a basis, to determine the part the superintendent shall have, and the part the board shall have, in the administration of the school. These policies must serve the purpose of combining the essential duty of the board of education as legally recommended, and also include those duties which may be delegated by the board to members of their personnel. These policies may be considered as a decalogue of principles for the guidance of members of the board of education and superintendent in distinguishing the duties and responsibilities of each.

1. The board of education is constituted by state laws to act as a legislative, executive, and judicial body for the maintenance and operation of the schools for public education.

2. The board of education shall function as a unit, with powers delegated only through official action, upon the basis of authority commensurate with responsibility delegated.

3. The board of education shall select a superintendent of schools, who shall act as a chief executive of the board of education.

4. The actual working relationship which shall exist between the superintendent and the board of education shall be clearly defined.

5. The organization for efficient and effective administration of the school shall be through the centralization of control and responsibility, in order to facilitate efficient coordination of effort and decision.

6. The board of education shall provide the necessary plant and equipment, and shall provide for the maintenance, realizing that there is a distinct relationship between the outcomes of instruction and the kind of equipment and plant provided.

7. All policies for the organization and administration of the school system shall be determined by the board of education, based upon recommendations for educational procedures presented by their executive, the superintendent.

8. The board of education shall reserve the power to act upon, veto, or approve all matters relating to the recommendations for the administration of the above policies determined.

9. The board of education shall disseminate information concerning the schools, based upon the approval of the superintendent, to the public and defend its policies before the public.

10. The above functions and powers shall be based upon the unified attitude of the board of education, that the function of public education is the instruction of the individual child so that he can live completely and successfully in a democracy.

In this study, it has been thought the best division could be made on the basis of the activity which is to be supervised or administered. Therefore, these activities will be considered as those essential in the instructional staff, the pupil personnel, the janitorial staff, business administration, public relations, and the building policy. After each of the various activities included under each separate heading, we find these activities justified and procedures based upon one or more of the principles laid down in the preceding decalogue. We may safely assume, if the policy recommended in the decalogue as being legally authorized, that therefore, those activities being based upon the larger number of decalogues being more highly authoritative and most likely to be legally recognized by the board members and school administrators alike.

Instructional Staff

1. The superintendent shall determine the qualifications upon which the selection of teachers shall be based and shall recommend the adoption of such a policy by the board of education. (Policies 1, 3, 5, 7, 8, 9, 10.)

2. Those teachers so qualified shall be selected and recommended by the superintendent to the board of education, who shall approve such selection and enter into contract with such teachers. (Policies 2, 3, 5.)

3. The assignment of such teachers entering into contract shall be the duty of the superintendent. (Policies 3, 5, 7.)

4. The supervision of instruction shall be carried on by the superintendent, or by some member of the instructional staff, who will be responsible to the superintendent for such activity. The superintendent is in turn responsible to the board of education for the activity of supervision. (Policies 2, 3, 5.)

5. The superintendent shall be responsible to the board of education for the improvement of teachers in service, and for such policies as he may formulate for the improvement which he considers necessary for the welfare of the public. (Policies 5, 7, 10.)

6. The salary schedule for the instructional staff shall be formulated by the superintendent, who will recommend the adoption of such a measure to the board of education. (Policies 1, 3, 7, 8, 9.)

8. Sabbatical leave for the improvement of teachers, which shall in the end improve the public educational process, shall be granted teachers desiring such leave upon recommendation of the superintendent and the approval of the board of education. (Policies 7, 8, 9, 10, 1.)

9. The adoption of rules and regulations for the efficiency of the instructional staff shall be formulated by the superintendent, or a committee of the staff designated by him for such purposes, and the adoption of such rules and regulations shall be recommended by him to

the board of education for approval. (Policies 3, 5, 7, 8, 9, 1.)

10. All reports of the instructional staff shall be directed to the superintendent through such channels as indicated in the rules and regulations adopted by the board of education. Administrative reports shall be made in writing by the superintendent directly to the board of education at each regular meeting. (Policies 1, 3, 4, 5, 9.)

11. The setting up of the organization, administration, and the supervision of the instructional staff shall be delegated to the superintendent by the board of education. (Policies 1, 2, 3, 4, 5, 8.)

12. The duties of the various members of the instructional staff shall be clearly stated in the rules and regulations, with such additional duties and powers as shall be delegated to the members by the superintendent, who shall be responsible to the board of education for the administration and supervision of such duties. (Policies 3, 5, 7.)

13. Extracurricular activity assignment shall be made by the superintendent, based upon individual qualification and experiences which contribute to the success of such activities. (Policies 3, 5, 7.)

14. The assignment and call of substitute teachers shall be a duty of the superintendent. Such substitutes shall be selected upon the basis of qualifications recommended by the superintendent and approved by the board of education. (Policies 1, 2, 3, 5, 7, 9.)

Instructional Matters

15. The course of study shall be formulated by the superintendent, with full consideration of the educational needs of the community, in harmony with current educational practice. The superintendent shall recommend the course of study to the board for its approval and adoption. Such changes as are necessary, or additions to, or extensions of, the adopted course of study shall become effective through recommendation and adoption as in the original course of study. (Policies 1, 2, 3, 4, 5, 7, 8, 10.)

16. The content, aims, and objectives of the various subjects in the course of study shall be set up by the teachers under the supervision of the superintendent, or some person delegated by him for such a purpose, and such aims and objectives shall follow the recognized educational objectives. (Policies 3, 5, 7, 10.)

17. The methods used in the instruction shall be based upon fundamental psychology, and the results of instruction shall be measured by the administration of scientific tests. Such changes as are necessary shall be based upon scientific investigation of new methods, keeping in mind the primary object of education. (Policy 10.)

18. The supervision of instruction shall be a responsibility of the superintendent and such supervision may be delegated by him to a member of the staff. The activities of supervision shall be carried out with the aim of improvement of instruction. (Policies 3, 5, 10.)

19. The superintendent shall be responsible for all materials and equipment for instruction. Such additions, replacement, and supplementation shall take place through recommendation of the superintendent and the approval of the board of education. (Policies 1, 2, 3, 5, 6, 8, 10.)

20. The library shall be under the control and supervision of a teacher, or member of the staff, appointed by the superintendent with

such powers and duties delegated to her as are necessary to efficient control and supervision of the library. (Policy 5.)

21. The board of education shall adopt such textbooks as are recommended by the superintendent, who shall be assisted in textbook selection by the teachers of the system. (Policies 1, 3, 5.)

22. The superintendent shall recommend, upon the approval of the board of education, and encourage individual or school investigation, or scientific experimentation, when present methods of instruction do not contribute to satisfactory results. (Policies 1, 3, 5, 7, 10.)

23. All such plans for experimentation must be completed with definite aims and objectives, with criteria formulated for judging the results, and such plans approved by the superintendent before such experimentation shall begin. (Policies 3, 5.)

Pupil Personnel

1. The superintendent shall formulate a set of rules and regulations for the guidance of pupils in a handbook. The handbook shall contain specific directions with regard to registration and enrollment, the selection of a course and subjects, the activity program, promotion and graduation, absence and tardiness, explanation of the grading system, and other matters of pupil personnel which he may deem necessary. The regulations shall be recommended to the board of education for their approval and adoption. (Policies 1, 2, 3, 5, 7, 8, 9, 10.)

2. The board of education shall hold the superintendent responsible for the maintenance of orderly conduct and shall delegate to him the authority to discipline violations of the rules and regulations, or misconduct on the part of students. (Policies 1, 2, 3, 5, 9, 10.)

The Janitorial Staff

1. The qualifications essential for guidance in the selection of members of the janitorial staff shall be formulated by the superintendent of schools and approved by the board of education. (Policies 1, 2, 3, 5.)

2. The superintendent shall select and recommend the employment of individuals for such positions and upon his recommendations and approval of the board of education such individuals shall be employed. (Policies 3, 5, 6, 7, 1.)

3. The supervision of the janitorial staff shall be delegated to the superintendent with the authority of dismissal of any member of the staff, when such a member fails to discharge such duties as are delegated to him by the superintendent. (Policies 3, 5, 6.)

Business Administration

1. The superintendent of schools shall set up an annual budget of expenditures and possible income. Such a budget shall be justified by current educational practice and economy, based upon the needs of the pupils and consistent with the philosophy of education and administration determined by the board of education and superintendent. Such budget shall be submitted to the board of education for their examination, approval and adoption. (Policies 1, 2, 5, 6, 7, 8, 9, 10.)

2. The superintendent shall be responsible to the board of education for all supplies and equipment and he shall maintain a cumulative inventory of the supplies and equipment as a part of the financial records. He shall, at the end of the fiscal period, submit to the board of education an inventory of the supplies and equipment belonging to the school. (Policies 1, 2, 3, 4, 5, 6.)

3. The superintendent shall recommend to the board of education the kind and amount of supplies and equipment necessary for the coming year, and he shall keep a record of the supplies and equipment purchased, in connection with the budget; and he shall submit in each monthly report the financial conditions as compared with the adopted budget. (Policies 1, 3, 6, 9.)

Activity	Board of Education	Superintendent
Determining qualification of teachers	Responsibility delegated	Assumes responsibility
Selection of teachers	Responsibility delegated	Assumes responsibility
Hiring teachers	Contracts	Recommends contract
Assigning teachers	Responsibility delegated	Assumes responsibility
Supervision of teachers	Responsibility delegated	Assumes responsibility
Improvement of teachers	Responsibility delegated	Assumes responsibility
Making salary schedule	Approves or rejects	Recommends
Teacher-tenure policy	Approves or rejects	Recommends
Leave of absence	Approves or rejects	Recommends
Rules and regulations for instructional staff	Approves or rejects	Formulates and recommends
Report of instructional staff	Accepts	Formulates and recommends
Set-up of organization and administration	Responsibility delegated	Assumes responsibility
Selection of substitute teachers	Responsibility delegated	Assumes responsibility
Calling substitute teachers	Responsibility delegated	Assumes responsibility
Course of study	Adopts or rejects	Formulates and recommends
Aims and objectives	Accepts	Cooperates with teachers
Methods	Delegates responsibility	Assumes responsibility
Materials and equipment	Delegates responsibility	Assumes responsibility
Addition, supplementation, or replacement of equipment	Approves or disapproves recommendation of superintendent	Recommends addition, supplementation, or replacement
Library		
Selection of textbooks	Delegates responsibility	Assumes responsibility
Adoption of textbooks	Delegates responsibility	Delegates control
Experimentation	Accepts recommendation	Selects in cooperation with teacher and recommends to board
Plan for experimentation	Adopts or rejects	Recommends adoption
Personnel regulations	Approves or disapproves	Recommends
Discipline	Approves and adopts	Recommends and supervises
Qualifications of janitorial staff	Delegates responsibility	Recommends adoption
Selection of janitorial staff	Accepts or rejects	Assumes responsibility
Supervision of janitorial staff	Accepts or rejects	Formulates basis of selection
Dismissal of staff	Delegates responsibility	Recommends for staff
Making budget	Delegates responsibility	Assumes responsibility
Adoption of budget	Accepts or rejects	Formulates and recommends adoption
Financial records	Adopts or disapproves	Assumes responsibility
Pupil-personnel records	Delegates responsibility	Assumes responsibility
Teacher-personnel records	Delegates responsibility	Assumes responsibility
Publications	Authority for publication	Recommends publication
Representative of school in public relations	Delegates responsibility	Accepts responsibility
Court of appeal	Responsible	Present
Building program	Adopts or disapproves	Recommends
Building site		
Criteria for		
Selection of site	Accepts or rejects	Formulates
Employment of architect	Accepts or rejects	Recommends
Employment of builder	Responsible	Advises
Inspection of building when completed	Responsible	Advises
	Responsible	Advises in selections of inspector

tion with the budget; and he shall submit in each monthly report the financial conditions as compared with the adopted budget. (Policies 1, 3, 6, 9.)

4. The board of education shall make out the tax levy, based upon the analysis of the budget adopted and the recommendations of the superintendent. (Policies 3, 5, 6, 8.)

5. All financial records of the school shall be kept by the superintendent. The records shall consist of a definite system of accounting recognized as being efficient and capable of being interpreted. All such records shall be open at all times for board inspection, and a section of the superintendent's report shall be devoted to the financial condition of the school. (Policies 3, 4, 5, 7, 8.)

6. The superintendent shall be responsible for the maintenance of personnel records of pupils and teachers. (Policies 3, 5, 6, 7.)

Public Relations

1. The superintendent, as the executive of the board of education, shall act as the representative of that body in matters relating to public relations with parents, patrons, and organizations. (Policies 3, 5, 9.)

2. The publication of notices, subject matter, policies, and actions of the board of education, which will be of direct interest to the community, shall be published, or made public by the superintendent. (Policies 1, 3, 5, 6, 7, 8, 9.)

3. The board of education shall act as court of appeal in all matters of disagreement between the superintendent and teachers, or parents. Such matters requesting board action in this connection shall be brought before the

board of education in writing in the presence of the superintendent. (Policies 1, 2, 5, 8, 9.)

Building

1. A building program for the school system recommended by the superintendent and approved by the board of education shall be adopted to satisfy the educational needs of the community. (Policies 1, 3, 6.)

2. The selection of a building site shall be made by the board of education upon the recommendation of the superintendent, who shall submit to the board criteria which may be used for the selection of the approved sites. (Policies 1, 3, 6.)

3. The architect shall be employed for the building by the board of education. He shall have had experience in designing school buildings, and be familiar with the educational factors involved. (Policies 1, 2, 5, 6.)

4. The architect and superintendent shall work together in the building plan, the superintendent acting in an inspectorial and advisory capacity as a representative of the board of education. (Policies 3, 5, 6.)

5. The board of education shall contract with the lowest bidder who is an experienced, successful, and reliable builder. The builder shall post a bond with the board of education as a guarantee of satisfaction. (Policies 1, 6.)

6. The inspection of the complete building shall be made by a representative approved by the board of education and the builder. (Policies 1, 5.)

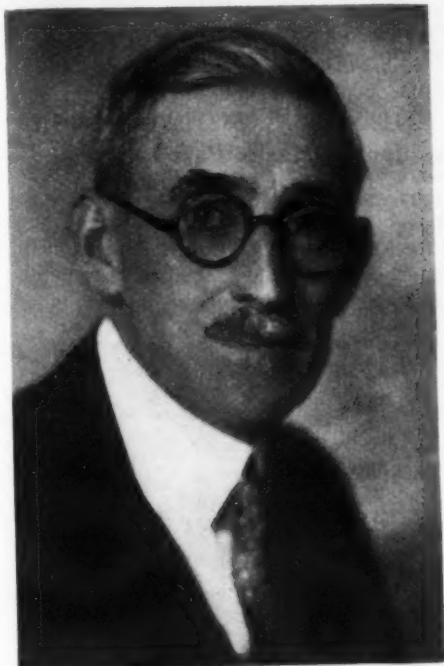
In the selection of those activities in which there may be some differences of opinions with

School Board Heads Who Make History in American Education

DR. GEORGE J. RYAN

President, Board of Education,
City of New York

Dr. George J. Ryan has been president of the board of education since May 9, 1922, serving longer in that capacity than any other individual in the history of the city. He has been a member of the board since January, 1918. During 1920 and 1921 he served as vice-president.



DR. GEORGE J. RYAN
President, Board of Education,
New York City.

Outstanding among the accomplishments of President Ryan is the establishment of the bureau of child guidance, an organization set up within the school system for the purpose of making more adequate provision for the maladjusted child and the child who suffers from mental disturbances. The ultimate aim of this bureau is to eliminate failures and to make it possible for every child to achieve a success commensurate with his capabilities.

At the outset of the present unemployment situation, President Ryan and Dr. William J. O'Shea, superintendent of schools, established what is known as the school-relief fund. Dr. Ryan and Dr. O'Shea promised the community that no child in the public schools would go hungry and none be without adequate clothing. Teachers, principals, and supervisors rallied to the support of the movement and with voluntary contributions from their salaries raised half a million dollars this year for the relief of needy school children. The fund is so administered that not one penny is spent for overhead.

A school-building program of unprecedented proportions, involving within the past ten years the erection of more than 300 new school buildings, or about one every twelve days, at an approximate cost of \$250,000,000, is another of President Ryan's achievements.

Dr. Ryan has been a resident of New York City all his life. He received his education in the public schools, at St. Gabriel's Academy, and St. Francis Xavier College. He received his LL.D. degree from Fordham. In 1915 he was a member of the state constitutional convention, and during the war he served as fuel administrator for Queens county. His affiliations with educational, charitable, and religious associations are many. He is a trustee of the Thomas Jefferson Memorial Foundation and a great student of Jefferson's life and letters. Dr. Ryan is a member of the French Legion of



The contribution made by leaders in the field of school administration was never more intense and at the same time more gratifying than it is at the present time. Those who head the board of education, though, are usually identified in an intimate way with the economic, civic, and social activities of their respective communities.

Thus, they are also exposed to the influences which at times batter their opposition to the cause of popular education in the guise of economy and retrenchments which are retrogressive in spirit and harmful in fact. The country must, in the stress and storm of a disturbed condition, look to these leaders for that calm steadfastness and guidance so essential to the school administrative service.

The biographical sketches here presented were in every instance prepared by writers who were in close contact with their subjects. They have lifted into view the true merits of the persons here discussed and thus provided a series of character studies well worthy the attention of the American school public.



Honor and has received decorations from Belgium and Italy.

Dr. Ryan is a banker. He is a man of great personal charm, unassuming, and carries none of the heavy solemnity that one might imagine would go with the austerity of his title.

ROBERT C. DUNN

President, Board of Education,
Toledo, Ohio

For four years Robert C. Dunn has been a member of the Toledo board of education, and during the past year its president. His years of service as a banker have fitted him to deal with the perplexing school-financing problems in this time of industrial depression. To this phase of school control he has given unsparingly of his time, energy, and experience.

Mr. Dunn has supported the established salary schedule for teachers and has urged the



ROBERT C. DUNN
President, Board of Education,
Toledo, Ohio

shortening of the school year temporarily, rather than the reduction of the salary schedule. He has insisted that the standard for employing and promoting teachers shall invariably be professional worthiness, and has strenuously resisted any attempt to inject influences other than approved educational principles into the management of the Toledo public schools.

LOWELL E. JEPSON

President, Board of Education,
Minneapolis, Minnesota

At the present time, when character education is of such outstanding importance among the objectives of public education, Minneapolis deems itself fortunate in having Lowell E. Jepson as president of the board of education. Mr. Jepson was first elected to the board of education in 1921. He served six years, then was



LOWELL E. JEPSON
President, Board of Education,
Minneapolis, Minnesota

again elected in 1929. At present he is serving as president of the board for the third year.

He is a graduate of Carleton College at Northfield, Minnesota, has a degree of master of science from the same institution, and is a trustee of the college.

Mr. Jepson is a successful manufacturer, and has always maintained an active interest in community betterment. He is a successful business executive, and, although a busy man, has time enough for school-board affairs. He has a genuine devotion to the school system, and decides questions on the principle of what is best for the children. He is a man of outstanding character and integrity, and a leader in the religious life of the community.

He has traveled extensively, both at home and abroad, and his leadership has been manifested in state and national affairs. He served for eight years in the state senate, and has been four times delegate to the national Republican convention.

He is an enthusiastic gardener and lover of nature; and spends much of his leisure outdoors, supervising his farm lands and working in his home garden.

FRANCIS J. BRADY

Chairman, School Committee, Providence, Rhode Island

Striking events in connection with the school department of Providence have given the present chairman of the school committee (board of education) unusual opportunities for the manifestation of ability in professional leadership.

Seven years ago the combined efforts of school officials, civic clubs, leading citizens, and local newspapers, resulted in the adoption of radical measures of reform. The new law provided for a school committee of seven members

to take the place of the former committee of 33 members. Departments relating to the schools, that had been administered by the city council, were transferred to the authority of the new school committee.

The planning of the organization of a new administration to meet the progressive ideals contemplated in the reform movement was a very difficult matter. The leading part in that task was undertaken by Mr. Francis J. Brady, at that time a member of the committee. Mr. Brady was generally recognized as a man who possessed various important qualifications. With a background of high scholarship, legal training, and earnest devotion to civic and educational interests, he is an indefatigable worker



FRANCIS J. BRADY
Chairman, School Committee,
Providence, Rhode Island

and thorough in the last details of whatever he undertakes. The framing of the by-laws of the school committee of the city of Providence to carry the new ideals into execution was largely the personal work of Mr. Brady. On account of special ability and service, he has held the position of chairman of the committee during the past three years.

IRVING C. PEARCE

Commissioner of Education, Saint Paul, Minnesota

Saint Paul, unlike most cities, has no board of education—the sole authority being vested in a commissioner, who is elected as a city councilman and appointed by the mayor to head this department of city government.

Irving C. Pearce, the present commissioner, is completing his first term of two years as the head of the department of education, which embraces the three separate bureaus—schools, library, and auditorium.

During this short term, he has made an enviable record as a far-seeing, hard-working, tactful manager. He has gained the universal support of the teachers and civic groups by enlisting their helpful cooperation in solving all the problems which confronted him.

Never before in the history of the Saint Paul schools has there been such genuine good will shown by parent-teacher and local improvement organizations toward school authorities and school projects.

In these days of financial stress, Saint Paul deems itself particularly fortunate in having a man who, by careful planning, saved the taxpayers thousands of dollars, without reducing the efficiency of the service.



IRVING C. PEARCE
Commissioner of Education,
St. Paul, Minnesota.

The Mattocks elementary-school addition now being completed, marks the end of the United Improvement Council school-bond issue of \$1,152,000 inaugurated in 1927. The close of the year likewise marks the realization of the one-and-one-half-million-dollar addition to the municipal auditorium. All building projects under Commissioner Pearce's direction have been carried out with characteristic energy, and for the best interests of the community.

DR. ROSHIER W. MILLER Chairman, School Board, Richmond, Virginia

Dr. Roshier W. Miller, chairman of the school board of Richmond, Virginia, for the past four years and a member of the board since 1920, is one of Richmond's outstanding civic leaders. For a number of years he has held a professorship in the Medical College of Virginia, but in addition to this, and his wide practice as a busy physician he finds time to work in closest cooperation with the superintendent of schools and the members of the school board. The following accomplishments



DR. ROSHIER W. MILLER
Chairman, School Board,
Richmond, Virginia.

mark his leadership in educational progress in city school systems:

A ten-year building program has been outlined, with the result that the following new buildings have been erected: one senior high school, two junior high schools, and two elementary schools.

Richmond's salary schedule, based upon length of service, has been maintained despite economic depression.

Vocational guidance has been introduced into high and junior high schools.

The work of the visiting teacher has become an integral part of the school system.

Classes for deaf pupils and sight-saving classes have been included in our educational program.

HENRY C. SCHAUMBURG President, Orleans Parish School Board, New Orleans, Louisiana

Mr. Schaumburg has given fifteen years of service to the cause of public education in New Orleans. Despite the fact that membership on the Orleans Parish School Board is usually



HENRY C. SCHAUMBURG
President, Parish School Board,
New Orleans, Louisiana.

eagerly sought by many candidates, Mr. Schaumburg was returned to his membership, last December, without any opposition.

During his administration, a city-wide public-school building program has been put into effect. Forty of the finest modern public-school buildings have been erected during his membership on the board. He is a zealous advocate of proper compensation for teachers, and despite the stringency of funds which confronted the board at the beginning of this school year, he was unalterably opposed to any reduction in the teachers' salary schedule.

Mr. Schaumburg is a retired merchant, who gives liberally of his time and talents to the cause of popular education.

School Board to Receive Refund

The board of education at Peoria, Ill., has received a remarkable offer from a local contracting firm, V. Jobst & Sons, who are erecting the new Roosevelt Junior High School. The firm has written the president of the board of education that any sum of money saved through the general reduction in wage levels of the craftsmen who are employed in erecting the new high school will be refunded to the board of education. The contract for the building was let before the new lower-wage arrangement had been made between the contractors' organization and the building crafts union, and Messrs. Jobst & Sons are passing on the saving to the board of education for the benefit of the taxpayers.

Bonding School Officials

H. H. Linn, Business Manager, Muskegon, Michigan

Part II

Conditions Governing the Use of Public Official Bonds

Status of Public Official Bonds. Public official bonds are not required by common law. According to Frost: "An official fidelity bond does not arise solely out of contract, but is an incident to an appointment or election from governmental sources. There existed no requirement at common law which compelled public officials to give a bond for the faithful performance of their official duties. Such a requirement, if it exists at all, must be found in the statutes."¹

However, if a public official gives a bond voluntarily in the absence of statutory requirement, the bond becomes a valid and legal obligation.

Approval of Bonds. As a general rule, where the statutes require that public officials be bonded, they do not acquire legal standing until this is done. Failure to conform to this requirement may result in the forfeiture of all rights to the office, thus creating a vacancy.²

As a general rule, bonds required by law do not become operative until they have been approved and accepted. Approval alone may not be sufficient, as there is a difference between approval and acceptance. However, some courts have ruled that, although the bonds have not been properly approved and accepted by the proper authorities, they were not invalid and did not release the sureties.³

It has also been held that an official bond is not valid until it has been delivered, and that the sureties are not liable for any default of the principal occurring before that time. According to *Ruling Case Law*, "the bond . . . takes effect, as a rule, from the date of its delivery and acceptance, and not from the date set therein."⁴

Cancellation of Bonds. Public official bonds are not cancelable at the sole option of the surety, since the public, as the beneficiary, has certain legal rights that are not to be imperiled. In some states certain public-official bonds are positively noncancelable, but in most of the states the statutes permit the release of sureties on certain classes of public-official bonds, upon their following certain very definite procedures in a strict and faithful manner.

Liability of Officials for Acts of Deputies and Assistants. According to Wentz, an authority on surety bonds: "A public officer is generally responsible for the official acts of the deputies and assistants he appoints. The doctrine is that the act of the deputy or an assistant, is the act of the official himself, who must take care to employ no person who will abuse his authority. The responsibility being imputed to the official, the surety upon this bond will likewise be liable."⁵

Many surety companies will not issue the primary bond to a public official who employs deputies or assistants who in the line of their duties might cause a loss, until these individuals are bonded likewise. Personal sureties may overlook this hazard and find themselves in trouble later.

Limitations to Liability on Bonds. The liability on a public-official bond extends only for the period indicated in the bond or for the term of office fixed by law. It does not cover any future appointment or subsequent election

School officials quite as much as school funds require the protection of adequate bonds. The present paper is the second of two searching discussions of this important problem.—The Editor.

even though the provisions of the bond are general and indefinite as to the time limit.⁶

The sureties on public-official bonds are liable only for those funds in the hands of the official when the bond is executed plus those additional funds received during the term of the bond subsequent to its execution. It has been held that they cannot be held liable for past derelictions of duty by their principal unless the bond is retrospective.⁷

Statutory Extension of Officials' Terms and Duties. It occasionally happens that the term of an official is extended by legislative action, or that new and additional duties are imposed upon him after his bond has been executed. As a general rule, when the term of office is thus lengthened by legislation, the sureties are not liable for losses occurring during this extended period.⁸ When the legislature imposes new duties upon the official which are not considered germane to his original office, the sureties, as a general rule, are not liable. If these duties are not disconnected or foreign to the office, but bear some relation to it, the sureties are liable for them in addition to the original duties.⁹

Special Bonds for Special Duties. Occasionally a public official is given special duties to perform in addition to those that properly fall within the functions of his office. As a rule, he is required to give a special bond covering those special duties in addition to the general bond covering his usual official activities. In this case the sureties on the general bond are not liable for losses that may occur and that are protected by the special bond.¹⁰ For example, if the general bond of a school treasurer does not cover special bond issues coming into his custody, a new bond must be given to protect these additional funds. The rulings in regard to this particular example vary among the several states, so local decisions must be obtained regarding the need for special bonds.

Torts of Public Officials. According to *Ruling Case Law*: "Broadly speaking, an official bond covers torts committed by the officer under color of his official right. But where an individual is injured by private and personal acts of an officer, and not by acts which he has done either by virtue of his office or under color of his office, his sureties are not liable."¹¹

Laches of Superior Officers. Various statutes are provided among the several states calling for the supervision and auditing of certain public-official accounts. But where those who are responsible for this supervision and examination fail to do so properly, whether due to negligence or carelessness, the sureties still are liable for any defalcations that may occur on the public-official's bond.¹² They may be relieved of liability, however, if fraud is proved.

Termination of Liability. Wentz, a recognized authority on the subject of surety bonds, has the following statement to make regarding the termination of liability: "The surety on a public-official bond is not normally discharged

until the officer has, without guilt or concealment, accounted for and paid over all funds due from him to the persons legally entitled to receive them. The filing of a new bond will not discharge the surety upon the old bond in the absence of statutory provisions therefor, or where such new bond is by law merely cumulative in its effect. Nor can the surety be released or discharged by a superior officer unless the cancellation is authorized by law. This is the rule even when the bond is given to the superior officer, if his interest is purely legal and not beneficial."¹³

The preceding quotation is not to be interpreted to mean that claims cannot be made against sureties after bonds have been discharged. It often happens that defalcations are uncovered years after an official has left office and his bond discharged. Claims for such losses may be made against the surety any time within the statute of limitations, but it must be proved that the losses occurred during the period for which the bonds were written. It is not always possible to present such proof when there has been no proper examination or audit of accounts during the officials' terms of office.

Cumulative Feature of Public-Official Bonds. A peculiar characteristic of public-official bonds is the cumulative feature. The term of an official may run for several years and he may be required to provide a new bond at the beginning of each year of his term. However, the issuance of these new bonds does not release the previous bonds given during that term of office and the penalties of these successive bonds become cumulative. Thus, an official having a four-year term of office who is required to give a new bond annually for \$10,000 becomes bonded for \$20,000 his second year, \$30,000 during the third year, and \$40,000 the fourth year. Cut-off clauses inserted in the contracts to abrogate this cumulative feature are no good in the case of public-official bonds.¹⁴

Personal Liability of Public Officials. Unless cared for by statutory provisions, a public official is not relieved of personal liability when he fails in the faithful performance of the duties of his office, just because he is bonded. If his bond is not sufficient to cover any losses that may occur in the discharge of his duties, the public may demand that he assume personal liability for the difference. This additional protection is of little value to the public, as a general rule, unless a loss has been occasioned by dishonesty, for the public has not been inclined to push this particular privilege.

Right of Subrogation. When a surety pays a loss incurred by a public official, he is subrogated to the rights of the public and is entitled to full reimbursement from the defaulting official. As a general rule, this subrogation exists only when the claim of the creditor (public) has been fully satisfied. For example, if an official is bonded for \$10,000 and is responsible for a \$15,000 loss, the surety is not subrogated to the rights of the public until the defaulting official has made good the additional \$5,000 not covered by the bond. If the original loss is only \$5,000 the surety is subrogated to the rights of the public upon making good this \$5,000 loss and may then seek reimbursement from the defaulting official.

Who Should Be Bonded?

Readers of the SCHOOL BOARD JOURNAL will want to know what classes of officials should

¹Frost, Thomas Gold, *Guaranty Insurance*. Little, Brown & Co., p. 405.

²*Ruling Case Law*, p. 447.

³*Ibid.*, pp. 500-501.

⁴*Ibid.*, pp. 501-2.

⁵Wentz, George Robert, *The Handbook of Fidelity and Surety*

Bonds, The Rex Co., Baltimore, Maryland, p. 139.

⁶*Ruling Case Law*, p. 514.

⁷*Ibid.*

⁸*Ibid.*, p. 504.

⁹*Ibid.*, pp. 503-4.

¹⁰*Ibid.*, p. 506.

¹¹*Ibid.*

¹²*Ibid.*, p. 511.

¹³Wentz, George Robert, *op. cit.*, p. 134.

¹⁴Lunt, E. C., *Surety Bonds*, Ronald Press, New York City, p. 137.

be bonded in order to safeguard the school funds against loss. The writer proposes the following rule: "All individuals directly responsible for the proper care, custody, and management of school funds and supplies, and by whom an act of negligence or wrongdoing may result in a monetary loss to the school district, should be placed under bond conditioned for the faithful performance of the duties of their respective offices."

If this rule is followed, many different classes of officials will need to be placed under bond; tax collectors, treasurers, auditors, purchasing agents, bookkeepers, business managers, some superintendents, some board members, some office clerks, stockroom clerks, managers of cafeterias, bookstores, student-activity funds, etc.

It is not to be inferred that all persons are to be considered dishonest, for the records of the surety companies prove that the vast majority are upright citizens. Joyce, former head of one of the largest surety companies in the world, has the following interesting comment to make in regard to this point: "In the last thirty years the company of which I am the head has bonded at least 7,000,000 men and women. . . . Not more than 1 per cent went wrong, and I suppose that hardly 1,000 persons altogether out of over 70,000 defaulters set out with the deliberate and premeditated intention to steal and ultimately keep their employer's money."¹⁵

It is argued that some individuals are so absolutely trustworthy that bonding is a needless expense. While it is granted that the vast majority are honest, no individual holding a responsible position directly connected with the handling of the public funds should be excused from giving a bond on the basis of such a faulty plea. It is the trusted official who has the best chance to do wrong. As pointed out by Joyce, "Did you ever stop to think that only a *trusted* employee is in a position to wreck an institution? No sane man will give a suspected employee a chance to embezzle. . . . Back of most big defalcations you will find a surprising latitude, amounting to culpable negligence, has been given to some time-tried subordinate."¹⁶

The reader is reminded, however, that dishonesty is not the only factor to be considered when discussing bonds for public officials. Many losses of school funds are caused by carelessness, ignorance, robbery, bank failures, etc. The public must be protected against these hazards.

There is also some objection to the use of bonds on the grounds that the business procedures used, the supervision of employees, the accounting system employed, the auditing of accounts, and the safety devices used are so excellent that it is impossible for a loss to be sustained. This is not a valid objection. All of these points just mentioned are safeguards and lessen the possibility of loss but they certainly do not eliminate the possibility. One may as well argue that fire insurance is unnecessary because fire extinguishers have been installed in a building, as to state that bonds are unnecessary because financial safeguards have been set up in the business department.

Receipts More Hazardous Than Expenditures. There is more dishonesty among individuals who handle cash receipts than among those responsible for disbursements (excluding grafters). Montgomery says: "An estimate prepared from long experience is that nearly, if not quite, 75 per cent of all defalcations and frauds are connected directly with a failure to account for income or cash receipts, whereas less than 25 per cent of them take the form of diversion

of cash after it has found its way into the treasury."¹⁷

It is easy to understand why this should be the case. Receipts are often taken in the form of cash. This presents a greater temptation to commit wrong. Many individuals paying over money neglect to ask for receipts, being interested only in paying certain bills. This opens a loophole for the person accepting the receipts, for in many instances there is no occasion for checking back on these cases and a dishonest person has an excellent chance to cover up all traces of the theft. It is somewhat more difficult to cover up dishonesty in connection with disbursements, for accounts must balance. In disbursing public funds usually two persons sign the checks, thus dividing responsibility, while often only a single individual handles the receipts. The greater the number of people involved in a financial transaction, the less the possibility of collusion and dishonesty.

Tax Collectors. All tax collectors should be bonded. Surety companies report that this class of public officials is one of their most hazardous risks. This is due to a number of reasons: (1) They handle receipts, which, it has just been pointed out, involves some risk; (2) accounting systems are not always adequate; (3) business procedures may be poor; (4) supervision over their offices may be meager or entirely lacking; (5) in some states the tax collectors are liable for losses due to bank failure.

The officials collecting the school taxes may be independent of school authorities who may have no direct voice in the arrangements for the tax collectors' bonds. Nevertheless, these school officials need to know what provisions are made to safeguard the school funds while in the collectors' custody and have the right to express their views publicly if adequate protection is not afforded. Pressure brought to bear by school officials for improvement in methods of collecting taxes may result in fewer losses of public funds. There certainly is a need for a change in the tax-collecting machinery in many of our states. In some instances petty politics has made a "stinking mess" out of the tax-collection situation.

School Treasurers. All treasurers or custodians of school funds should be bonded. One might expect this to be a general statutory requirement in all the states but such is not the case. Smith reports that the statutes of only 32 states require that the custodians of local school-district funds must be bonded.¹⁸ Back in 1922, Updegraff found that the treasurers of practically one thousand rural-school districts of New York state were not bonded.¹⁹ Undoubtedly many treasurers required to furnish bond have neglected to do so and today many local school-district funds are in jeopardy because no one has checked up on these officials to learn if the bonds have been provided.

Superintendents and Members of Boards

Whether or not a school superintendent should be bonded depends on his financial duties and responsibilities. If he receives or disburses money, signs checks, keeps financial accounts or serves as treasurer, he should be bonded. However, many superintendents have no duties or responsibilities directly connected with the management of the school funds and in this case bonds would be superfluous.

As a general rule, members of boards of education are not required to furnish a bond and there is no need for such a requirement unless individual duties or responsibilities make it necessary or desirable. It is true that some

few board members have been convicted of graft, especially in connection with the letting of contracts, but these convictions are very rare in comparison with the great number of officials who serve in this capacity. A better way to protect school funds against the depredations of individual school-board members is to elevate the method of selecting or appointing these members from "machine" and "ward" politics to a higher plane calling for the general election of these officials by popular vote irrespective of partisan politics, and making them fiscally independent of municipal control.

Various other school officials and employees need to be placed under bond, if in accordance with our rule, they are directly responsible for the proper care, custody, and management of school funds and supplies and may cause a loss of school funds or property as a result of their wrongdoing or negligence. Bookkeepers, purchasing agents, business managers, auditors, clerks, and managers of nonacademic funds are included in this group.

For What Amount Should a Bond Be Written?

It is quite impossible to make a definite statement regarding the exact amount for which any official should be bonded, as a great many factors enter into each individual case. The total amount of money handled during the term of the bond must be considered, as well as the greatest amount available at any one time. The accounting system used, the business procedures employed, the auditing of accounts, and the division of responsibilities have an important bearing on the amount of the bond. The better business procedures, the more safeguards, the fewer possibilities of individual theft or collusion, the less the need for a large bond; and vice versa.

Before attempting to determine what the amount of the penalty of the bond should be for any particular individual or position, the following questions should be asked:

1. What is the total amount of funds for which he may be responsible during the year or during his term of office?
2. What is the greatest amount of money for which he may be responsible at any one time?
3. Is a good accounting system used?
4. How often are the accounts audited and what is the nature of the audit?
5. By whom are the accounts audited?
6. Does the individual have sole responsibility for signing checks or must they be countersigned by someone else?
7. Is he liable for funds on deposit in banks, should the banks fail?
8. To what extent do deputies or assistants handle the funds for which he is responsible?
9. Are his responsibilities and duties so divided with others that collusion is made more difficult?
10. Is he responsible for several different funds, either in connection with his office or outside organizations, so that shortages in one fund may be covered by transfers from another?
11. What special safety devices are used, such as check protectors, "safety" check paper, seals, vaults, etc.?
12. Does he keep public funds in a bank in his own personal account or are they placed in a separate public-fund account?
13. How frequently must he turn over monies coming into his possession to depositaries or other persons?
14. Does he handle cash?
15. Is he required to issue receipts for all monies received?
16. What authorization is given for the disbursement of funds?
17. What supervision does he have by superior officers?

(Concluded on Page 92)

¹⁵Joyce, Wm. B., "Human Beings Who Are Good Risks—And Poor Ones," *The American Magazine*, Vol. LXXXIX, p. 37, April, 1920.

¹⁶*Ibid.*

¹⁷Montgomery, Robert H., *Financial Handbook*, Ronald Press, New York, p. 515.

¹⁸Smith, John Edgar, "Current Practice and Procedure Relating to Financial Responsibility and Accountability of Public School Officials." An unpublished master's thesis in the University of Minnesota library.

¹⁹Updegraff, Harlan, *Financial Support*, Rural School Survey of New York State, Vol. 3, p. 42.

Economies in Public-School Expenditures for Instruction

Cecil W. Scott, Fellow in Educational Administration, Teachers College, Columbia University

Budget reductions necessitated by generally adverse economic conditions are being made by school systems of all sizes in every section of the country. Numbers of systems that have cut their budgets during the past two years are being forced to reduce still further, and a large proportion of those systems which weathered the first two years of the depression are likewise being compelled to make substantial reductions in planned expenditures for 1932-33. The existing situation brings to the fore the problem of how to reduce school costs, without simultaneously reducing the educational efficiency of the school program, or with the least possible harmful educational results. This is, in fact, the most threatening problem school administrators have to face today.

The Problem of Reducing School Expenditures

Now, if appreciable reductions are to be made in public-school expenditures, they must come through decreases in the large items of the appropriation measure. The most important of these items are by all odds expenditures for buildings and for instruction, the latter of which accounts for approximately 75 per cent of total current expense. Building costs can seldom be reduced, except by the curtailment of building programs; and this method does not show immediate results, for actual payments in this field ordinarily are to meet commitments made years in advance. Industrial expenditures, therefore, are the only ones which offer immediate opportunities for large reductions.

School systems caught in the whirlpool of an unprecedented economic depression have initiated, and no doubt will continue to initiate for some time to come, instructional economies ranging in quality from "good" through "indifferent" down to "bad." Some of these practices are mentioned by the professional educator only with bated breath, since they challenge long-established customs or cherished beliefs. Others are recognized as of doubtful value, and still others as definitely desirable. But, regardless of the consensus of opinion relative to certain instructional economies, these practices should be included along with all others in any study or discussion of the general problem.

The writer recently undertook a comprehensive study of financial economies in the field of instruction, basing his investigation in part upon the thesis that public-school administration should ever be striving to attain greater efficiency at lower cost. In his opinion, no instructional practices which require the expenditure of funds should be considered sacred, until they have become more firmly established than is now the case. A description of the writer's study, with a discussion of the results obtained and of the issues involved, comprise the major part of this article.

Nature of Study and General Results

Primarily, the purpose of the study was to discover the opinions of representative administrators and supervisors regarding certain instructional economy practices, i.e., the desirability of each, and to reveal their experience with these practices. A secondary purpose of the study was to bring together the important possible methods of reducing the cost of the instructional program.

For collecting opinions and facts regarding practice, a check list was carefully devised. The methods of economizing presented in the main body of this list were obtained through a survey of pertinent educational literature and

TABLE I. Desirability and Prevalence of Possible Methods of Reducing School Costs Through Changes in Class Size

Responses of 120 Summer-School Students of Graduate Rank, Divided into an Instructional Group (47 members) and an Administrative Group (73 members), Regarding Proposed Economies in this Field.... Scores Being Expressed as Percentages of the Totals Possible.

Proposed Economies	Instructional Group Percentages			Administrative Group Percentages		
	A ¹	B ²	C ³	A ¹	B ²	C ³
1. Increase class size only on certain of the various school levels	72	19	13	45	16	12
2. Increase class size on all levels without making the several averages identical.....	20	15	6	34	23	18
3. Increase class size on all levels and establish one standard class size for the entire system.....	10	12	6	16	13	7
4. Increase class size in individual subjects and in separate subject fields	33	13	7	50	24	22
5. Increase the size of special classes.....	16	5	1	23	7	7
6. Eliminate all classes below certain minimums....	40	13	9	26	18	16

¹Column A, percentages of students who considered the respective proposed economies desirable.

²Column B, percentages of students who had either used or seen the practices mentioned in use during the past five years.

³Column C, percentages of students who considered the practices used or seen in use true educational economies.

an investigation of other sources of information. These practices were grouped under four heads, as follows: (1) class size; (2) organization practices, teaching methods, and instructional supply practices; (3) the curriculum; and (4) the instructional staff. All items included were definitely financial economies, that is, they would reduce costs wherever employed. Three columns for checking were provided and directions in the foreword advised that methods considered desirable from an educational standpoint be checked in the first column, those the checker had tried or seen tried in the second, and those tried or seen tried which, on the whole, had yielded true economies in the third.

Two groups of graduate students registered at Teachers College, Columbia University, for the summer session of 1931 cooperated in the study. One group was composed largely of supervisors and other workers interested primarily in instruction; the other, with one exception, contained only school superintendents and supervising principals. Forty-seven usable replies were received from the first group, and 73 from the second. Twenty-four states were represented by the replies from the second group, these being scattered over the entire country, except for the Pacific coast itself, and the geographical distribution of replies received from the first group was of like nature. The results of the study, therefore, may be termed representative, both as regards territory covered and groups of schoolworkers included.

Four tables presented in connection with other sections of the article show in composite form, the data obtained from the check lists. In some cases two or more economy methods have been grouped together under one head. This grouping was done during the tabulation process and the percentage scores for each item in the tables were calculated on the basis of the respective scores possible. The same base was used for determining the three percentage scores in a given group, i.e., the scores for the instructional group on the first item of Table I, although the score under C in each case might almost as well have been figured by using the total numerical score under B as the base. Students were warned not to check under C any items they had failed to check under B. Thus, in the case of Item 1 of Table I, 50 per cent of those who had seen the practice in use deemed it a true educational economy. However, only 6 per cent of the total number of students in the group had used the practice, or seen it in use, and judged it desirable. This fact appears to be as significant, or even more important, than the one cited first and, further-

more, there is no confusion regarding its meaning. For these reasons, all scores under C were arrived at by use of the same respective bases as those used for corresponding scores under A and B.

The most striking general characteristic of the tabular data is that scores indicating desirability are higher than corresponding scores representative of experience, there being but one exception, and the respective differences are in many cases very large. Obviously, practical schoolworkers feel that possibilities for effecting instructional economies have, on the whole, not been well exploited.

As intimated in the preceding paragraph, scores representative of experience tend to be low. There is, however, a rather high degree of positive correlation between the two types of scores, which is an important consideration. More often than not, practices used or seen in use were judged to be true economies.

A final important general feature of the tabular data is that scores for the administrative group are, by and large, higher than those for the supervisory one. Ninety-three scores, including zeros, are recorded for each group in the four tables, and in only 21 of these cases do the values for the supervisory group rank higher than those for the administrative. There are 6 cases of ties and 66 instances where the administrative group has superior scores. The scores representing desirability show the greatest differences, for here the administrative group rates above the supervisory on 26 of the 31 items which make up the four tables. These general results are at least partly explained by the fact that administrators are more concerned with the fiscal aspects of education, and presumably are more intelligent along this line, than are supervisors. The writer proposes that the tendency described in this paragraph lends a measure of validity to the study.

Class-Size Economies

Of the methods suggested in Table I for enlarging the size of classes, increases only on certain of the various school levels (i.e., kindergarten, elementary school, etc.) received by far the highest score given by the instructional group and shared high honors, in the case of the administrative group, with the score given increases in class size in individual subjects and separate subject fields. It appears that these two devices offer greater opportunities than any others in the table. General increases on all levels with, or without, the resultant effect of making average class size the same in the several school divisions, were considered undesirable by both groups. Experience scores on the

two proposals of this type, however, indicate that such increases often produce good results.

Increasing the size of special classes is a practice which though favored to some extent, was questioned by both groups. As such classes are now operated, they ordinarily cost from two to three times as much as regular classes, and the results obtained frequently, if not always, fail to warrant the expense. Experimentation with larger groups and different methods of teaching, perhaps with different objectives in view, might produce results of importance both financially and educationally.

Rather high scores were given the last item in the table, namely, the suggestion that all classes below certain minimums be eliminated. A recent statistical study of class size in cities, conducted by the Research Division of the National Education Association, contains information regarding the minimum and maximum class limits that cities cooperating in the study attempt to maintain.¹ No standard minimums have been established, and there probably should not be any, since conditions vary as much as they do among localities; still the fact remains that small classes are expensive and should be eliminated below certain justifiable minimums, these low limits to be determined by local school authorities.

The problem of optimum class size is one of the oldest in the field of education, yet its solution does not appear at present even to be near. Practically all experimental studies of the problem have shown that, in terms of results measured by commonly used testing devices, large group instruction is equally as efficient as small. This being the case, classes will inevitably increase in size during the existing economic crisis.

That there exists at present a general trend toward larger classes, is a matter of common knowledge among school people. The class-size study of the National Education Association referred to in the foregoing presents data showing the prevailing tendencies.² Springfield, Mass., is a good example of a city that during recent years has increased class size sufficiently to take care of practically all increases in pupil enrollment. Over a three-year period, enrollment in the Springfield schools has increased approximately 2,500, while the teaching staff has increased only one in number.³ No harmful educational results are apparent, according to a statement from the executives in charge of the system.⁴

Unfortunate economic conditions account only in part for the gradual movement toward larger classes. The trend existed before the depression began. Many cities have their elementary classrooms equipped to care for from 40 to 50 pupils and their high-school classrooms to provide for much larger numbers than were once considered desirable. Local studies are being carried on in a number of cities to discover relationships between class size and teaching results, as is reported in the National Education Association's study of class size.⁵ These general facts, particularly the tendency to investigate the efficiency of different-sized classes, may be regarded as hopeful elements in the present class-size situation.

Both the results of this study and the paucity of knowledge regarding the most efficient size of class may be used as arguments for increasing class size. For, if a considerable pro-

TABLE II. Desirability and Prevalence of Organization Practices, Teaching Methods, and Instructional Supply Practices to Reduce School Costs¹

Proposed Economies	Instructional Group Percentages			Administrative Group Percentages		
	A ²	B ³	C ⁴	A ²	B ³	C ⁴
1. Use teaching methods that make possible large group instruction	49	23	20	65	39	27
2. Use ability grouping and honor study halls	34	24	20	51	24	16
3. Have some or all high-school classes meet on alternate days, shorten high-school class periods, and reduce the length of school life	24	17	13	40	22	18
4. Have students furnish own materials, e.g., textbooks, paper, pencils, etc.	44	41	35	43	49	38
5. Have students pay book and laboratory fees	20	15	13	35	29	24

¹Same subtitle as in Table I.

²Scores have the same meaning as in Table I.

³Ibid.

⁴Ibid.

portion of school people think large group instruction is desirable, and it cannot be proved that better results are obtained with smaller groups, then school systems are somewhat unjustified in demanding that public funds be supplied for maintaining the practice of small-group instruction. Widespread experimentation, and perhaps of the large-scale type, is the only process by which the questions at issue may be settled.

Economies Through Organization Practices, Teaching Methods, and Instructional-Supply Practices

Savings of the type here discussed might almost as well have been taken up under class-size economies, for the two types are complementary. Increases in class size necessitate suitable organization practices and call for correspondingly adapted teaching methods. Therefore, practically all financial savings in the field of instruction resulting from employment of given organization practices and teaching methods actually accrue from the opportunities afforded for increasing the size of classes.

Use of teaching methods adapted to large-group instruction is, in the opinion of the two groups of school workers in the present study, the most desirable of the familiar economies proposed in Table II. The scores based on experience are large enough to be impressive. Changes in classroom procedures and techniques during the past 15 or 20 years have been noteworthy, and even more remarkable changes may be expected within the next few years. Visual education and instruction by radio are as yet in their initial stages. These devices, plus increased use of the laboratory method, and other techniques, may become the major means of saving on instructional costs.

WHY FREE BOOKS?

Educational authorities do not demand that their teachers be supplied with free chalk, free erasers, free stationery, free desks, or any other part of their school equipment, but they unhesitatingly demand that they be supplied with free books in many parts of the country.

Unreasonable demands upon publishers for free books on the part of teachers, administrative officers, school boards, and textbook commissions are characterized by some of the bookmen interviewed as a serious problem in carrying on their business. In general it is contended that no other business enterprise is expected to distribute free samples of its wares in any such wholesale fashion as book companies are compelled to do, and that members of the teaching profession itself do not make such demands in purchasing other necessary school supplies and equipment. The net result of the practice is higher prices for the books which are sold to the school public, since all the expense of marketing, as well as the cost of production, must be liquidated in the revenues from sales. — J. B. Edmonson.

Ability grouping and honor study halls which were favored by both groups are evidently considered successful in practice. Having high-school classes meet on alternate days, shortening the length of high-school periods, and reducing the length of school life were also approved by the two groups. Why advanced students in high school must attend class five times a week to reach similar goals attained by their college freshmen brothers and sisters in no more than three meetings, is a question for which no satisfactory answer has been found. Reducing the length of class periods and also of school life, are practices which may well be challenged. Yet, it is a fact, that many high schools are securing good results with periods as short as 45 minutes in length, and many public-school systems are turning out well-equipped graduates who have spent only eleven years in school.

Both the administrative and the instructional groups approved the practice of having students furnish their own supplies, over two fifths in each case indicating that the practice is desirable. This approval is supported by a marked degree of experience and satisfaction with the device. Having students pay book or course fees and laboratory fees, did not appeal strongly to either group; likewise the scores showing experience are somewhat low. In case students furnish their own materials, school costs are decreased to some extent but the total cost of education in any given community is very likely increased. And there is a further disadvantage in that some students may be unable to furnish equipment themselves. If instructional materials are furnished by the school system, the problem of reducing supply costs is essentially one of eliminating waste. The most feasible plan for cutting expenditures, as the writer views the problem, is to charge small rental fees for books and small laboratory fees, provision being made, of course, for students unable to pay.

Consolidation of small high schools, which is not proposed in Table II, offers possibilities for reducing instructional costs. Such schools are inefficient from a financial standpoint, largely because they must maintain a large proportion of small classes. A study of class size in 116 small Massachusetts high schools, practically all with less than 200 pupils, shows that a big majority of all classes are under 20 in size.⁶ Of the high schools included in this study, those with 50 pupils or less maintain 63 per cent of their classes for 10 or less pupils; those with enrollments ranging between 51 and 100 maintain 41 per cent of their classes for 10 or less pupils; and so on, until schools with 200 or more enrollment are reached, in which 11 per cent of the classes are maintained for 10 or fewer pupils.⁷ High schools such as these care for more than half of the total high-school population in the United States, consequently they offer a fertile field for economizing.

⁶Hood, J. T., Jr., "Instruction Costs in Typical Small High Schools," *Nation's Schools*, Vol. IV, No. 3, p. 63, September, 1929; No. 5, p. 38, November, 1929.

⁷Ibid.

(Concluded in March)

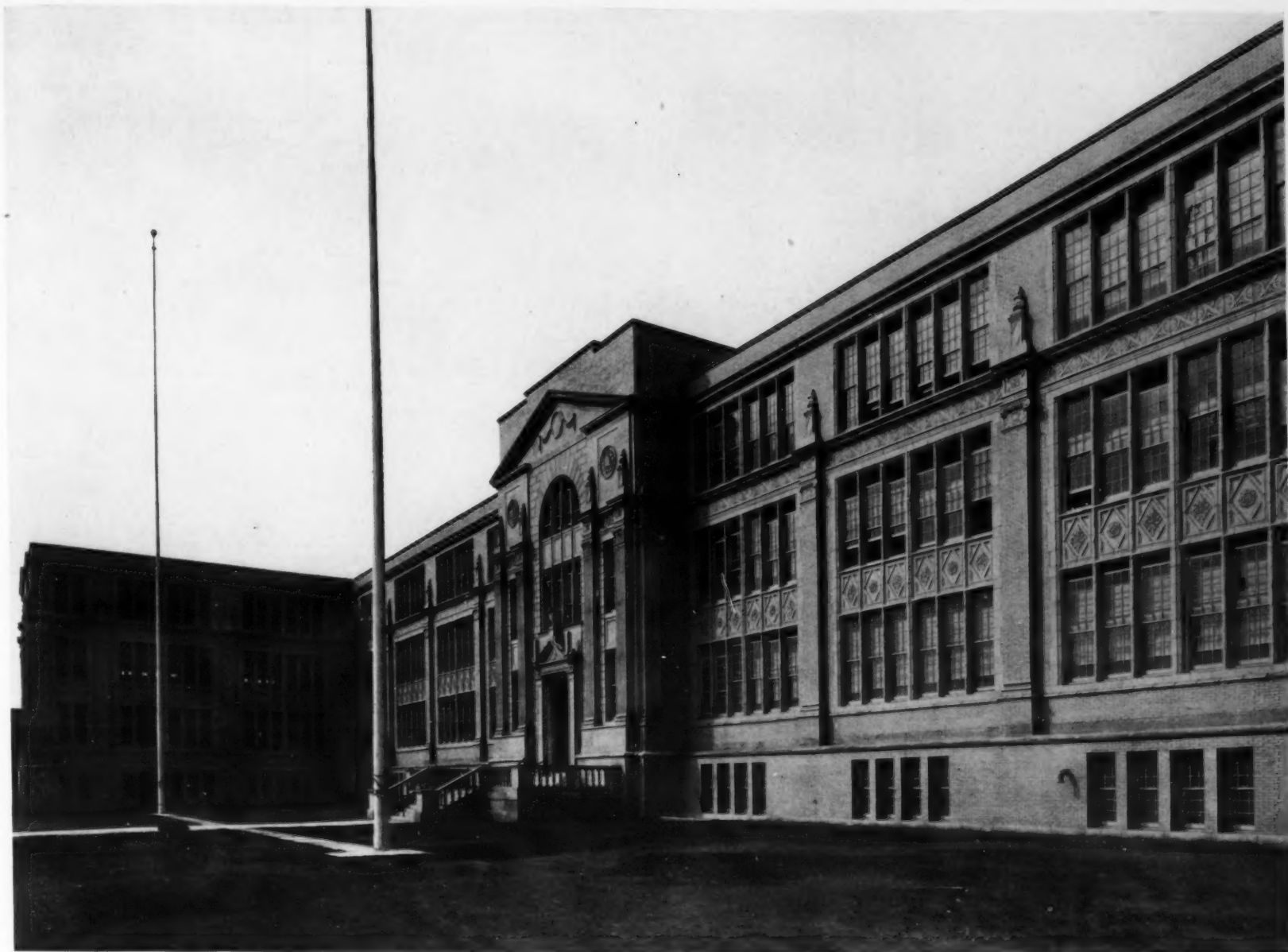
¹Size of Class in 47 Cities Over 100,000 in Population, Circular No. 1, 1931, p. 2 and pp. 23-27; and Size of Class in 101 Cities, 30,000 to 100,000 in Population and 56 Cities Under 30,000 in Population, Circular No. 6, 1931, pp. 39-50. Educational Research Service, National Education Association, Washington, D.C.

²Op. cit., Circular No. 1, p. 2 and pp. 26-31; Circular No. 6, pp. 51-58.

³Scott, Zenos, and Granrud, John, "The Program for the Revision of Teachers' Salaries in Springfield," *AMERICAN SCHOOL BOARD JOURNAL*, Vol. 82, No. 4, April, 1931, pp. 39-40, 127-28.

⁴Ibid.

⁵Op. cit., Circular No. 1, p. 3; Circular No. 6, p. 4.



GROVER CLEVELAND HIGH SCHOOL, NEW YORK CITY, NEW YORK

Designed by the Bureau of Construction and Maintenance, New York City Board of Education. W. C. Martin, Architect.
A view from the front court of the Grover Cleveland High School showing the main building and the auditorium wing. In another wing at the right (not shown in this illustration but extending from the other end of the main building) are the gymnasium and swimming pool.

THE GROVER CLEVELAND HIGH SCHOOL OF NEW YORK CITY

Howard A. Shiebler, Assistant to the Superintendent of Schools

The Grover Cleveland High School, in New York City, is the newest of the city's secondary schools. It provides accommodations for nearly 4,000 students in general and commercial courses, and was erected at a cost of approximately \$2,000,000.

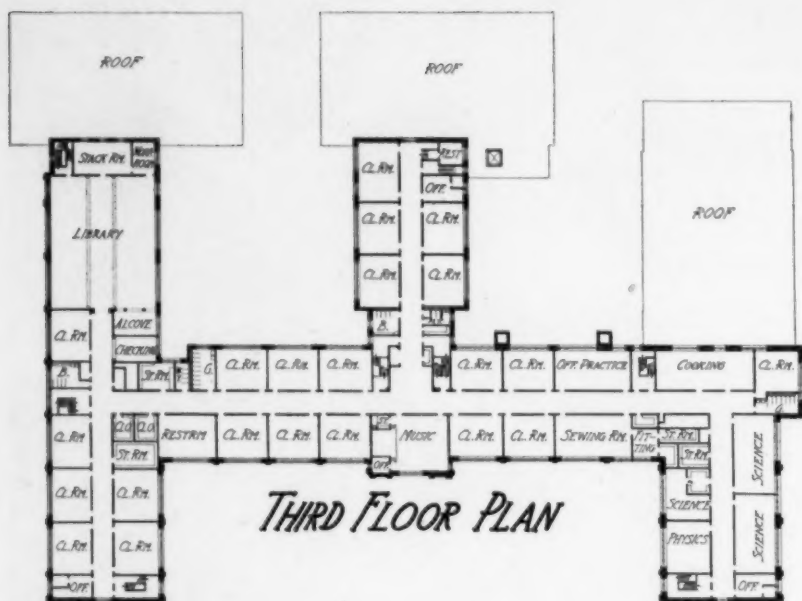
The architecture of the building is an adaptation of English Gothic, which lends itself quite readily to schoolhouse design. English Gothic, as exemplified in the manor houses and early colleges, permits an ample supply of window space so necessary in the planning of school buildings. The source of the design of the Grover Cleveland High School is Kirby Hall, a manor house near the village of Weldon in Northamptonshire, England. The Grover Cleveland High School and five other New York schools follow the general character of Kirby Hall, but their architecture is varied to meet school requirements.

Special features of the Grover Cleveland High School building include an auditorium and gallery with 1,391 sittings, a boys' gymnasium of 7,680 sq. ft. encircled by a running track, a girls' gymnasium of 4,350 sq. ft., and a girls' auxiliary gymnasium of 3,230 sq. ft.; a swimming pool with plunge, and teachers' and pupils' cafeterias.

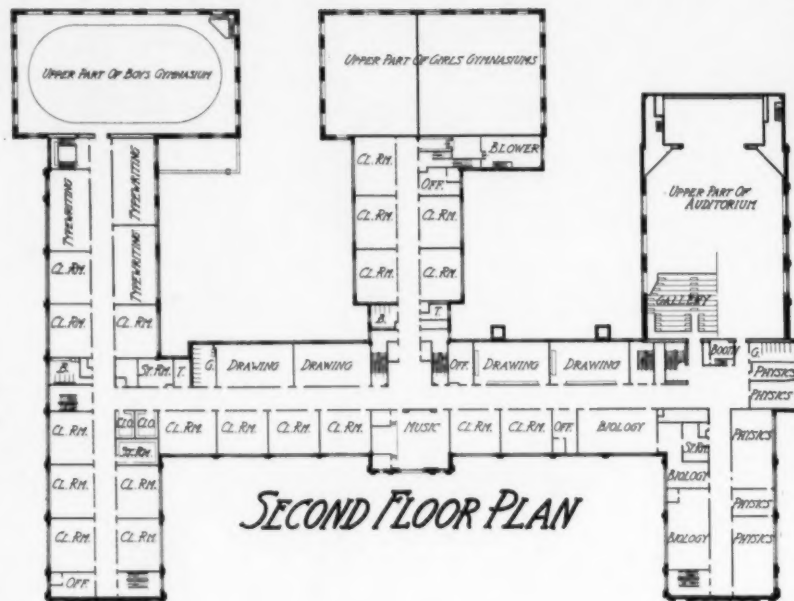
In the basement of the building is a printing office where the school will publish its own newspaper, together with a shop and record rooms.



FACADE, GROVER CLEVELAND HIGH SCHOOL, NEW YORK CITY, NEW YORK
Designed by the Bureau of Construction and Maintenance, New York City Board of Education



THIRD FLOOR PLAN



SECOND FLOOR PLAN



CAFETERIA



FIRST FLOOR PLAN

GROVER CLEVELAND HIGH SCHOOL, NEW YORK CITY
Designed by the Bureau of Construction and Maintenance, New York City Board of Education.
W. C. Martin, Architect.

Twenty-two classrooms, a chemical laboratory, chemistry recitation, and preparation rooms are on the first floor.

Nineteen classrooms, 3 typewriting rooms, 4 drawing rooms, biology rooms, and a physics laboratory are on the second floor.

A library with 160 sittings, a music room, an office-practice room, a general-science room, and 21 classrooms are on the third floor.

Following is a complete statement of the accommodations:

Basement

Natorium with plunge	Assembly and storeroom
Pool equipment room with natatorium	File room
Girls' locker room	Record vault
Boys' locker room	Printing room
Girls' shower room	Publication office
Boys' shower room	Furniture storeroom
Girls' suit room	Two dressing rooms
Boys' suit room	Property room
Sterilizing room	Wardrobe room
Girls' emergency room	Music instrument room
Boys' emergency room	Two storerooms
Girls' physical-examination room	Three janitor's sink closets
Boys' physical-examination room	Three supply closets
Girls' health training	Dust bin
Boys' health training	Janitor's supply room
Girls' swimming instructor's office	Switchboard room
Boys' swimming instructor's office	Battery closet
Pupils' cafeteria	Transformer vault
Teachers' cafeteria	Engineer's closet
Lunch kitchen	Elevator
Women help's emergency room	Blower room
Women help's dressing room	Boiler room
Women kitchen help's dressing room	Coal storage
General shop	Four girls' toilets
Storeroom of general shop	Three boys' toilets
Rifle range	Men's toilet
	Men teachers' toilet
	Women teachers' toilet
	Engineer's and male help's toilet

(Continued on Page 92)



AUDITORIUM, GROVER CLEVELAND HIGH SCHOOL, NEW YORK CITY, NEW YORK



ALEXANDER HAMILTON HIGH SCHOOL. LOS ANGELES, CALIFORNIA
Austin and Ashley, Architects, Los Angeles, California

The Building Program of the Los Angeles School District

Frank O. Evans, Director of Administration Research, Board of Education, Los Angeles, California

As a result of the bond issue, authorized by the people of Los Angeles in March, 1931, the board of education of that city has launched a new building program designed to relieve the most urgent needs of the city schools. This bond issue, amounting to \$12,720,000, was the fifth to be submitted to the people since 1920, and brought the total amount of school bonds authorized during that period up to \$74,260,000. In addition to funds raised by the sale of bonds, a considerable amount of tax money was used for building purposes during that period. For instance, in the year 1929-30, no bond funds were available, and revenue amounting to approximately \$2,605,000 was included in the budget for building purposes.

The practice of building from current funds was considered as a permanent policy at that time, but with the retrenchment the following year, it seemed best to eliminate, or greatly reduce, capital outlays from tax funds and to place before the people once more the proposition of an issuance of bonds to meet building needs.

Necessity of Large Expenditures

The justification for the large expenditures for building purposes in Los Angeles, lies in the fact that during the decade from 1921-31, the enrollment in kindergarten, elementary, and high school more than doubled. This increase, which amounted to more than 127,000 students, at the ordinary rate of assigning pupils, would require the construction of approximately 4,000 classrooms with offices, auditoriums, and service rooms in addition.

Aside from the difficulty of providing 400

new classrooms each year, the people of the city have been faced with the added responsibility of providing junior-high-school facilities for many thousands of children. The process of changing over to the six-three-three plan of organization, which was in its inception ten years ago, is now more than 85 per cent complete.

The Basis of the Bond Issue

The budget forming the basis for the proposed bond issue was based upon a survey of building needs covering a period of two years. Eighty-seven building projects were included, with additional sums allocated for miscellaneous improvements, and a small unappropriated balance. One-half million dollars was included for the construction of school tunnels under dangerous street crossings.

The survey of building needs revealed that there were 753 elementary classrooms in bungalows and temporary buildings and 236 classes housed in frame structures built previous to the present century. While it was not considered practical to replace all temporary and obsolete units, plans were laid for the construction of permanent buildings to replace bungalows at 16 school sites, and for the replacement of 19 unsafe frame structures. Three new elementary schools and seven additions to existing plants were included in the budget.

By December 4, 1931, \$2,203,500 of the bond funds for elementary purposes had been appropriated for the purchase of land and the construction and equipment of buildings for elementary schools. These appropriations include replacement for 14 of the 19 frame struc-

tures scheduled for replacement in the bond budget; and provided for bungalow replacement at 11 schools. In five of these cases, the proposed new building constituted the first permanent unit of a school which had been housed entirely in bungalows. Bond funds have been apportioned for new additions at five schools, making a total of 30 elementary projects definitely under way.

In the secondary field, the survey made preparatory to the preparation of the bond budget revealed three major discrepancies. The urgency of the building program of the preceding decade had led to the omission of important units in many of the high-school plants. In a majority of cases the physical-education unit had been deleted, and in 23 junior and senior high schools the facilities for caring for this part of the educational program were found to be inadequate. With so many physical-education units to be built, much time and effort has been given to the working out of a standard building plan for these units. Since complete facilities cannot be provided, it was thought wise to put into each junior and senior high school at least a first unit, consisting of dressing rooms, offices, and service rooms to which a playing floor can be added at a later date. The present program includes a standard unit for junior and senior high schools which have only temporary or makeshift quarters for physical education.

Provision for Junior High Schools

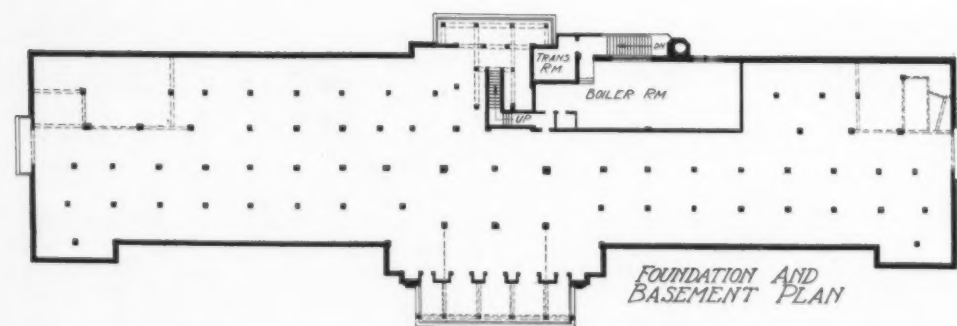
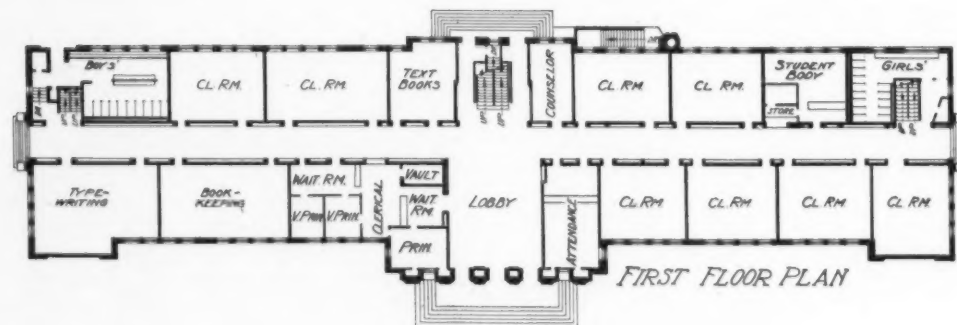
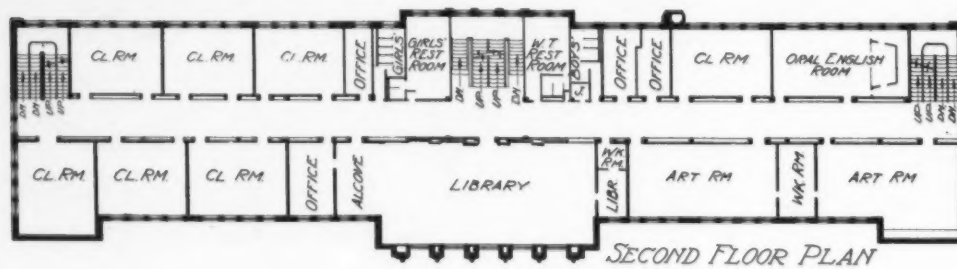
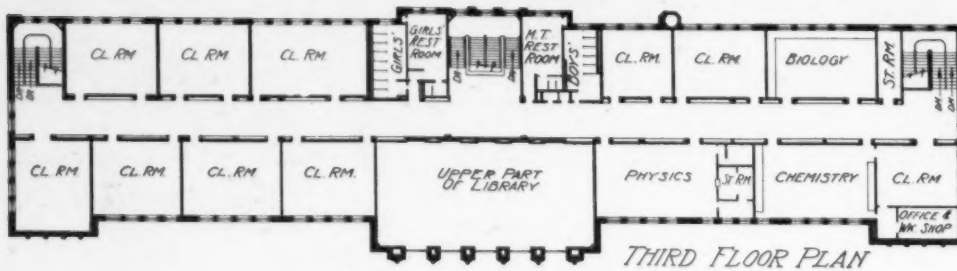
The survey revealed that certain sections of the city had not yet received the benefit of junior-high-school facilities. With the construc-



COMMERCIAL DEPARTMENT

ALEXANDER HAMILTON HIGH SCHOOL, LOS ANGELES, CALIFORNIA
Austin and Ashley, Architects, Los Angeles, California

HIGH-SCHOOL LATIN CLASS

ALEXANDER HAMILTON HIGH SCHOOL, LOS ANGELES, CALIFORNIA
Austin and Ashley, Architects, Los Angeles, California

tion of at least four new junior high schools, and the possible adaptation of two elementary-school sites for junior-high-school purposes, more than 95 per cent of the students of the seventh and eighth grades will be found in junior high schools, which represents as complete a transfer to the six-three-three plan as it would be possible to accomplish. Certain

elementary schools are so isolated that it will be necessary for them to continue to offer work for the seventh and eighth grades.

The survey brought out that a number of the senior and combination high schools are overcrowded. Eight senior high schools had a total enrollment exceeding the rated capacities of the plants by approximately 4,000 students.

The rate of growth in many other high schools made it evident that plans for additional classroom space must be undertaken at once.

Definite apportionments totaling \$2,600,100 have been made for junior- and senior-high-school projects. In addition to necessary land purchases, these apportionments provide for the construction and equipping of nine physical-education buildings, one shop, and one home-economics building at junior high schools. Senior-high-school projects include nine physical-education buildings; one science building; two art and academic classroom buildings; two home economics and academic classroom buildings; one commercial, home economics, and academic classroom building; one shop; and four additions consisting of standard classrooms. Out of the total bond fund of \$12,720,000, \$4,803,600 have been appropriated, and other plans are under consideration. It is planned to expend approximately one half of the bond funds during the present fiscal year.

Additional Funds Needed

The present building program does not meet all of the building needs of the schools of Los Angeles, but is designed to meet the urgent needs during the coming year. After the present bond issue is exhausted, it will be necessary either to resume the building tax to finance the construction of approximately 400 classrooms a year, or to call for additional bond funds. The present outstanding bonds represent less than one fourth of the bonding power of the high-school district and approximately one third of the elementary-school district.

LOS ANGELES BUILDS ANOTHER MAJOR HIGH SCHOOL

Valerie Watrous

Not only will the memory of Alexander Hamilton be kept alive by the christening of the newest major high school in the city of Los Angeles, but this great American statesman's idealism and fine loyalty to his country will be kept before the students of this school as a standard of citizenship.

The Alexander Hamilton High School was opened the first of September, 1931, in one of the outlying sections of the Los Angeles city district. It was built at a cost of approximately \$430,000. The school was established at 2955 Robertson Boulevard to relieve the overcrowded conditions of several large high schools in the western section of the city and to reduce the distance that students were traveling from their homes to their schools.

John C. Austin and Frederick M. Ashley designed the group of four buildings which are of reinforced concrete and of fireproof construction. The exterior is face brick, and artificial stone was used for contrast. The roof is of Spanish-tile design, and the entrance lobby and stairs reflect the spirit of old California in that they are paved with the square padre tiles of the size and type made by the early Spanish priests and still are seen in many of the old missions built nearly 200 years ago.

Throughout the buildings, which border a large quadrangle to become the exclusive play-field of the girls, there is not only the feeling of structures intended to function satisfactorily for the purposes for which they were designed, but there is also the feeling of gracious lines, harmonious wall spaces of imitation Travertine stone, and pleasant perspective achieved through wide corridors, spacious stairways and well-balanced design.

The buildings contain 2,219,000 cubic feet and cost .1903 cents per cubic foot, this cubage being based from the bottom of foundations to the average heights of roof.

Contracts for the structure were awarded February 2, 1931, and the buildings were completed, equipped and ready for use on August 28, the same year, three days before the date fixed for the opening of the city schools.

The main structure houses administrative offices for the principal and vice-principals, counselors, and secretaries, as well as classrooms, a bookroom, and storage room. There are 25 regular classrooms, together with chemistry and physics laboratories, a biology laboratory, and rooms especially equipped for book-keeping and typewriting in this building which is three stories in height with a small cupola or tower that accents the face of the structure.

The library, situated on the second floor of the main building, is an unusually attractive room. It is large and well-lighted and offers every advantage for research and study.

At the east side of the campus is a domestic-science, home-economics, and cafeteria building. This is a two-story structure of the same general construction as the main building and reached by a colonnaded passageway which affords the students protection in passing to and from the main building in wet weather.

The cafeteria has a seating capacity of 400 with two service lines for students and one for members of the faculty. In the faculty, dining-room space for seating 50 persons has been arranged. The kitchen is provided with the most modern equipment, including a large electrical refrigerator. An outside service counter where students who do not wish to use the cafeteria may stand in line and make their selections is included in the plan. At this counter they may



ENTRANCE DETAILS, ALEXANDER HAMILTON HIGH SCHOOL, LOS ANGELES, CALIFORNIA
Austin and Ashley, Architects, Los Angeles, California

purchase ice cream, sandwiches, bottled milk or fruit juices, and luncheon dishes of cooked food in waxed-paper cartons. These service counters are especially popular in Southern California, since the majority of students prefer to eat their lunch somewhere on the campus in the sunshine.

The second floor of this structure has been equipped with sewing rooms and two practical cooking laboratories.

In the physical-education building are found shower and dressing-room facilities for 1,000 boys and 1,000 girls. There are also rooms for corrective physical education and restrooms. The gymnasium and exercise floors are not yet built, but provision has been made to complete them at an early date.

The shop building, a one-story structure, contains a woodshop and a printshop, a drafting

room, electric shop, and auto and machine shops.

All buildings are heated by steam from low-pressure boilers located in the main classroom building. Mechanical ventilation is provided for all lavatories, for the cafeteria and kitchen and for the shower and locker rooms.

In arranging the buildings in relation to the site, provision was made for an auditorium and the extension of each of the other buildings as the need develops.

The corridors and all of the special rooms are equipped with cork floors. The entrance doors of the administration building are of antique wrought-iron grillwork, the same effect being carried out in the lighting fixtures which are embellished through the use of amber glass of antique design.

It is the practice in Los Angeles to give to each senior high school the name of some distinguished statesman or noted figure in science or education. Since every school has its colors and its athletes are given a vernacular designation, the new student-body officers, with the coöperation of the principal and members of the faculty, determined to select the brown and green of the leather jerkins worn by a company of soldiers organized by Alexander Hamilton in 1775 and known as "The Hearts of Oak."

While classrooms were provided to take care of approximately 1,000 students, an additional 600 may be accommodated through the use of special rooms and the arrangements of schedules. Although the expectation was that the first year's enrollment would not exceed 900, within a month of the opening date the Alexander Hamilton High School had a student body of 1,559.

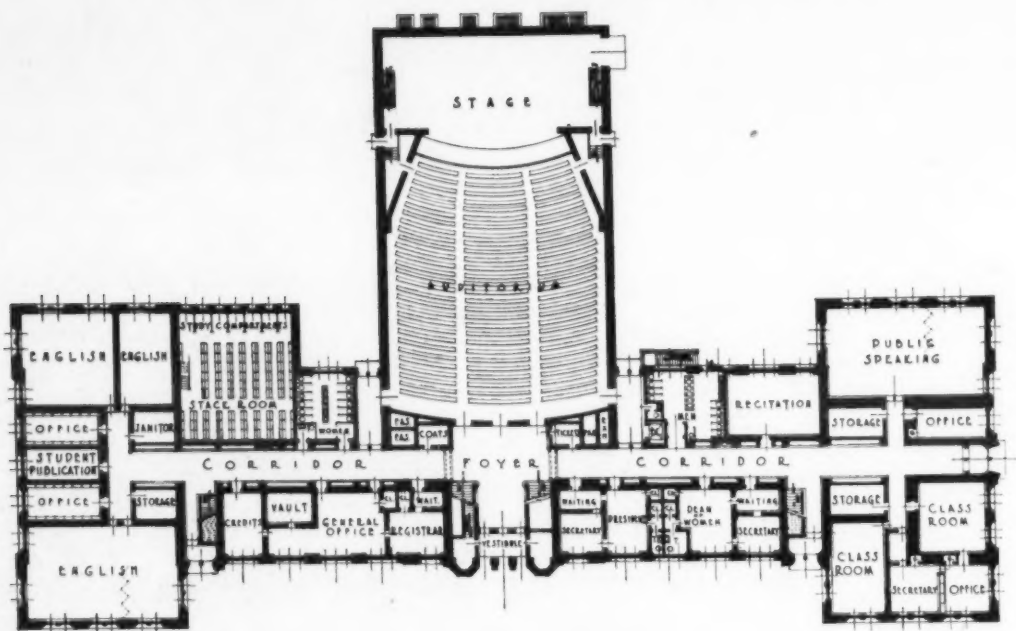
At the present time this new institution is a six-year school, although it is anticipated that a junior high school will have to be built in the near future to serve that district.



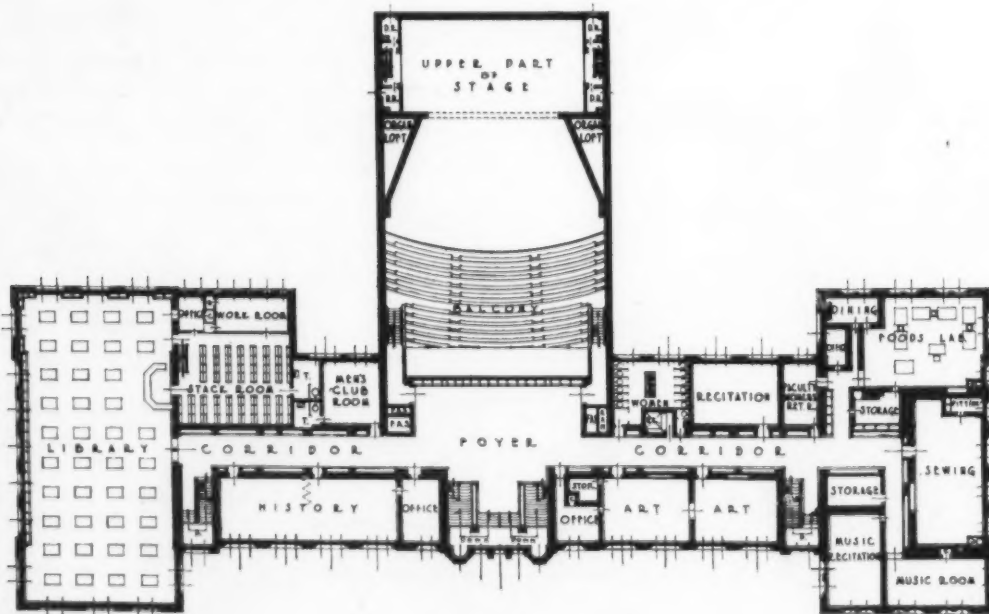
MAIN STAIRWAY LEADING UP FROM THE ENTRANCE LOBBY AT THE ALEXANDER HAMILTON HIGH SCHOOL, LOS ANGELES, CALIFORNIA
Austin and Ashley, Architects, Los Angeles, California



CENTRAL MICHIGAN NORMAL SCHOOL, MOUNT PLEASANT, MICHIGAN
Malcomson & Higginbotham, Architects, Detroit, Michigan



FIRST FLOOR PLAN



SECOND FLOOR PLAN

CENTRAL MICHIGAN NORMAL SCHOOL, MOUNT PLEASANT, MICHIGAN
Malcomson & Higginbotham, Architects, Detroit, Michigan

A TEACHER-TRAINING SCHOOL

The administration building of the Michigan Central State Teachers College at Mount Pleasant, Mich., was completed and occupied in the spring of 1928 and serves for general classroom, assembly, and administration purposes.

The building is 300 ft. in length, is three stories high, and is built entirely of fireproof materials. The exterior design, which is Gothic in detail and spirit, has been developed in red brick with gray limestone trim.

The first floor contains on each side of the main entrance the several general and private administrative offices. On this same floor also there are three special offices for department heads, six recitation rooms, and various small service rooms. On the second floor the most interesting room is the library which has seating accommodations for more than 300 students and book stacks with a capacity of 100,000 volumes. On this floor also there are nine recitation rooms and various smaller rooms for service purposes.

On the third floor there are six classrooms, a large cafeteria, and a small room for special recitation and extracurricular activities. The cafeteria has a seating capacity of more than 300 and can on occasion accommodate 400. The music department is placed in the fourth and fifth stories located in the tower.

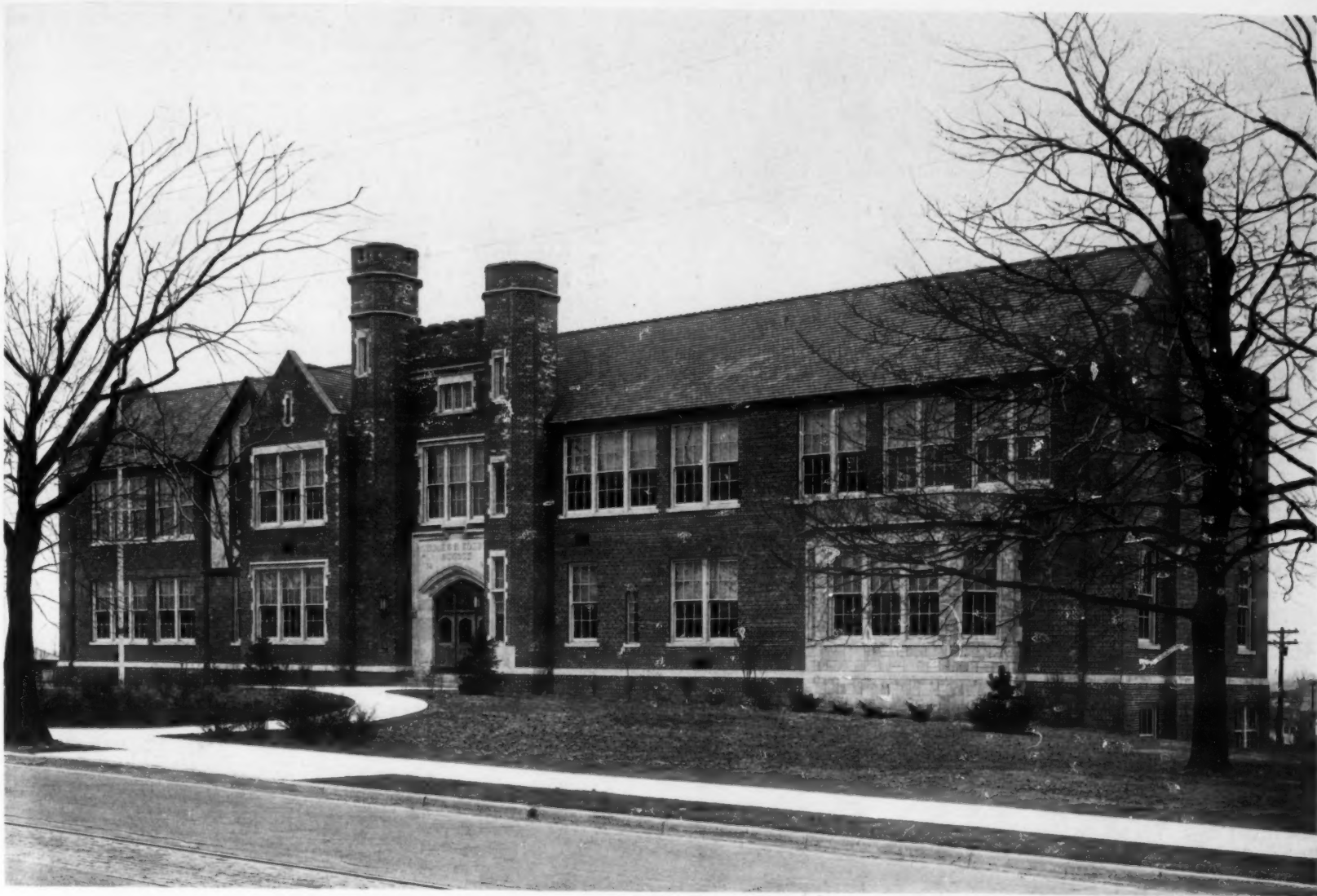
The rear wing of the building contains the auditorium which has a total seating capacity of 1,600. The building was planned by and erected under the supervision of Messrs. Malcomson and Higginbotham, architects, Detroit, Mich.

ACTED AS ASSOCIATE ARCHITECTS

Mr. H. E. Reimer, of Marshalltown, and the firm of Dougher, Rich & Woodburn, were associate architects in the planning and construction of the Marshalltown senior high school and junior college at Marshalltown, Iowa. The plans, specifications, and structural details were furnished by Dougher, Rich & Woodburn, and the supervision of the construction was in charge of Mr. Reimer and Dean P. C. Packer, of the University of Iowa.

Pennsylvania School-Board Convention

The Pennsylvania School Directors' Association met at Harrisburg, in the new Education Building. The principal speakers were State Supt. James N. Rule, Governor Pinchot, and others. The governor's wife tendered a reception to the delegates.



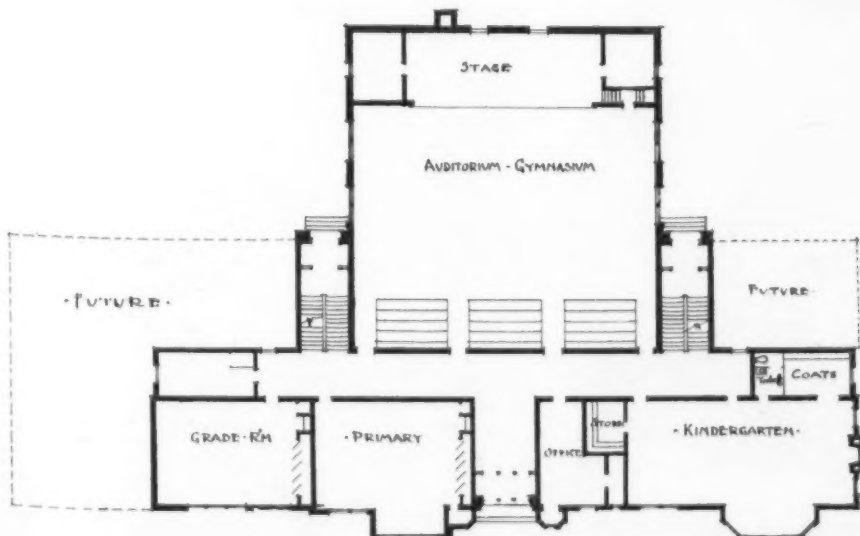
EDISON SCHOOL, DANVILLE, ILLINOIS
Harvey F. Skadden, Architect, Danville, Illinois



BASEMENT PLAN

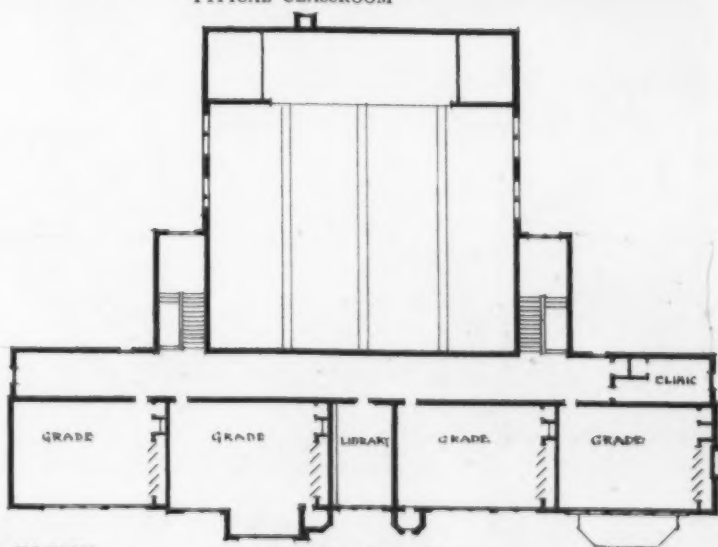


TYPICAL CLASSROOM



FIRST FLOOR PLAN

EDISON SCHOOL, DANVILLE, ILLINOIS
Harvey F. Skadden, Architect, Danville, Illinois



SECOND FLOOR PLAN



PRIMARY DEPARTMENT, EDISON SCHOOL, DANVILLE, ILLINOIS

A SCHOOLHOUSE PLANNED TO FIT THE SCHOOL PROGRAM

A careful adjustment of the plan to the educational program is the outstanding feature of the new Edison School, at Danville, Illinois. The architects have successfully provided for a rather rich elementary-school curriculum and have at the same time taken into account the fact that the district where the school is located is growing and will require additional classroom space in a few years.

The building is located in a fine residential neighborhood, a fact taken into account by the architect in developing the English domestic gothic design of the exterior. The building is faced with a local red brick, laid in English cross bond and set off with a very conservative amount of limestone trim. The roof is a pleasing green blend of shingle tile, which contrasts beautifully with the brickwork and harmonizes with the heavy foliage that prevails in the neighborhood.

The building is located on a site which slopes from the front enough to raise the playroom and the boiler room at the rear entirely above the grade. The front of the basement is unfinished, except for shower rooms for the boys and girls. The first floor contains the kindergarten,



KINDERGARTEN, EDISON SCHOOL, DANVILLE, ILLINOIS

AUDITORIUM-GYMNASIUM, EDISON SCHOOL, DANVILLE, ILLINOIS
Harvey F. Skadden, Architect, Danville, Illinois

teachers' restroom, offices, primary grade room, and second-grade classroom. The second floor contains at present four grade rooms, a library, and a medical-inspection room.

The building is constructed of masonry walls, with steel-joist and light concrete floor slabs. The stairs are reinforced concrete, faced with terrazzo, and fitted with nonslip material on the treads. The classroom floors are of magnesite composition and the gymnasium has a maple floor laid in mastic. The ceilings throughout the building are of matboard, finished in a pleasing color, and effective in improving the acoustic quality of the building. The walls throughout are plaster, except in the gymnasium-auditorium, where a semiglaze brick has been used to a height of 6 ft., and a fine quality of warmly colored finish brick up to the ceiling. The doors and wood trim throughout are of oak. The trim has been reduced to a minimum by the use of glazed buff brick at the base and window sills.

Each classroom has a ventilated wardrobe for the pupils, a teachers' closet, and a supply cabinet. Slate blackboard has been used on the wardrobe doors and classroom walls.

The office, the teachers' restroom, and ample space for storing materials, etc., have all been successfully designed with the activities of the respective classes fully in mind.

The heating plant is a vacuum-vapor sys-

tem, with two boilers. Ventilation in the classrooms and the auditorium-gymnasium is provided by unit ventilators. The air is exhausted through the wardrobes into the corridors and out through vents located in the second-story corridor ceilings. The entire heating and ventilation is controlled by a dual-type thermostatic system.

The building was begun in June, 1929, and completed for occupation February 1, 1930. The cost was \$99,861.44, including architects' fees. The equipment, purchased separately by the board of education, cost \$41,000. The cost per cubic foot was 22¼ cents, and the cost per pupil, \$340.

The educational requirements for the building were set up by Mr. C. E. Vance, superintendent of the Danville schools, and the plans were developed from these by Mr. Harvey F. Skadden, architect, of Danville.

Can School-Building Costs Be Lowered Without Lowering Standards?

Frank H. Wood, Educational Consultant, New York City

Have school-building costs been mounting more rapidly than other costs? Are they excessive — out of proportion to the needs? Are the monies devoted to this purpose used to best advantage?

We are told that the total value of public-school property in the United States¹ in 1917-18, was \$1,983,508,818 and that in 1928 it was \$5,548,938,599. In the aggregate this sounds like a huge amount — an increase of 180 per cent. But, the total expenditures for public schools for the same period increased from 763 million to more than 2 billion dollars, 186 per cent increase for school costs against 180 per cent for increase in valuation of school property.

Moreover, included in property valuation are sites, apparatus, and equipments. In these, the rate of increase has been presumably in excess of that in building costs — particularly in case of sites, the increase in size and cost of which has been an outstanding feature of this period. Allowance also should be made for the fact that in 1917-18 the real value of the postwar dollar had not come to be adopted as the unit of measure; also for the later estimated increase in the value of the then existing properties.

In our comparison of postwar building costs, we must not forget an increase of from 100 to 150 per cent in labor, material, and equipments; we must not forget that during the war there had been a general cessation of building operations that needed to be overcome, and that a large percentage of the buildings of 1917-18 were old and antiquated structures, erected on the go-as-you-please plan before any state standards had been adopted.

Growing Outlays for Schools

The foregoing method of comparison of costs has been used instead of the actual capital outlay as reported, in the belief that it gives a more accurate estimate of comparative costs for the period. In 1917-18, building was almost at a standstill. A comparison from that abnormally low record would, in itself, not tell the truth. Let us examine the facts from that standpoint, however. The total expenditures for 1917-18 were 64 million as compared to 411 million in 1925-26. Building operations were not resumed freely until some years after the close of the war. There was widespread expectation that the high prices — the war prices — could not continue. The reports of the U. S. Bureau of Education showed an increase in capital outlay from 64 million in 1917-18 to 154 million in 1919-20, to 305 million in 1921-22, to 388 million in 1923-24, and to 411 million in 1925-26. They showed a decline to 252 million in 1927-28. We would not naturally look for an increase in the intervening years.

Were we to adopt as our measuring unit the expenditure reported for 1917-18, our war year, the increase for the period would be 292 per cent in comparison with an increase of 27 per cent for "general control of schools," of 640 per cent for "fixed charges" in conducting and of 802 per cent spent for "auxiliary agencies" for the same years.

All in all, the point should be stressed that for this period the increases in instruction costs, property valuation, and total expenditures were comparatively uniform at 175, 180, and 186 per cent, respectively, the increase in property valuation being 6 per cent less than the increase in total expenditures. In view of the conditions existent at the close of the war and the increase of 102 per cent in secondary-school registration since the war, may we not well express surprise that the expenditure for new buildings has not been relatively more? Expenditures for instruc-

tion were about 56 to 57 per cent of all school costs, and expenditures for capital outlay about 16 to 18 per cent of school costs, according to my estimate. In my opinion, no apology or studied defense is needed for the total expenditures for postwar school buildings.

Right here, I think it will be of interest to quote an extract from the pen of Dr. Fletcher B. Dresslar, taken from the survey which he made in the U. S. Bureau of Education report of 1911 of the decade then ended: "The total value of all public-school property" he said, "has increased from \$550,531,217 to the enormous sum of \$967,775,587 in 1909. No one who is conversant with the educational history of the world will fail to see evidences of a movement which cannot be matched by the records of the past. Greece and Rome in the days of their greatest advances knew naught of school buildings as they exist today. Far more money is expended in public-school property than was required to maintain all the machinery of our Federal Government in 1910.

"But," he adds, "let us not boast of good works and forget those useless expenses of our so-called enlightened civilization. We spend each year for purposes which all reason and scientific investigation condemn as harmful, enough money to duplicate all our school buildings and have millions of dollars left for providing worthy playgrounds for our children."

No Cause for Disturbance

The "enormous" increase in the value of public-school property for the first decade of the century to which Dr. Dresslar refers was 76 per cent. The increase was just an even 100 per cent for the first nine years of the second decade; and the forthcoming report of the Office of Education will doubtlessly show an increase of approximately 150 per cent for the third decade. In comparison with the purchasing power of the dollar, therefore, the ratio of increase for the past decade will be less than that of the preceding decade which included the war period, and not in excess of the first decade of the century, of which Dr. Dresslar wrote. We may well rejoice in the reflection, however, that the playgrounds to which Dr. Dresslar referred are now, in rapidly increasing number, coming to be a reality.

We have no occasion to be disturbed by the magnitude of the expenditure *per se* that has gone into school construction through these years. It is none too much. However, we may well stop to inquire, whether we are getting full value for these large expenditures? Are they adequately controlled? What, if any, are the faults? What are the remedies?

There are certain basic facts and conditions upon which, it is assumed, there will be general agreement. Let me state some of them:

1. The value of a schoolhouse is to be measured by the extent and effectiveness of the service it renders as a school. Buildings of the same cubage content and cubage cost may differ widely in their service value. Neither size, nor cost, alone is a true measure of value.
2. In reckoning costs, the life of a building, the operation and maintenance, and the economy of administration should be carefully weighed.
3. The only reason for the construction of a school is to meet the needs of those who are to be housed in it. It follows, therefore, that those who plan school buildings should be familiar with, and experienced in, school needs and school requirements.
4. The factors of location, surroundings, and variation in needs of different populous communities differ widely. They must be carefully

studied and thoroughly understood before they can be intelligently met.

In general, it may be said that to the degree and extent to which these basic principles are more fully recognized and closely applied to actual building operations, to that extent and degree building costs can be lowered without lowering standards.

Planning a Technical Job

To plan school buildings of any considerable size in such a way and manner as to fit each case with discriminating nicety, to have just what is needed, just where it is needed, and no more than is needed, is a highly technical piece of work. It is not strange that those entirely unfamiliar with the modern school, who know naught of school administration or the varying types of school organization, naught of school management or school methods, or the changing trends of education, and, on the other hand, naught of construction methods and requirements to meet these needs, whose practical knowledge of schools may have been limited to experience as a pupil in a rural community, or a private school — it is not strange, I say, that men with such a background are not fitted to do such highly technical work in preliminary planning, to pass upon administrative problems, to determine room and space requirements, the proper grouping of rooms, and the correlation of departments for effective administration; and it ought not to be expected of them. Where planning is left to such as these, as it so often is, one must expect to get an ill-fitting garment; and that means waste, expensive upkeep, unsatisfactory service, and unnecessary cost.

From observation, from the testimony of others, and from personal experience, it is my deliberate judgment that a minimum saving of 10 per cent in utilization values can be steadily and regularly made by the employment of competent educational advisers, skilled in construction problems, to make surveys, to present and discuss needs with local school officials, to draw up building programs and schedules, and to check and recheck preliminary plans based upon them, preparatory to the authorization of working drawings. It would be possible to draw upon personal experience for numerous cases where reductions ranging from \$10,000 to \$200,000 in individual cases have resulted from this practice.

But, a further line of evidence, it occurs to me, is pertinent at this point. Schoolhouses in untold number throughout the length and breadth of the land are silent witnesses to the truth of this contention and may offer testimony in proof of it. Here these buildings stand in our midst, have stood and will continue to stand throughout their lifetime, to present in concrete form absolute, indisputable proof to those who will look and listen if they can see and hear.

Do Buildings Meet Needs?

We have agreed that the real value of a schoolhouse is measured by the kind and degree of service that it renders. In evaluating such a building, therefore, we should ask ourselves the question, "To what extent is it fitted to the needs of the community, and how far, and how well can it be utilized to serve the purpose for which a school is constructed?" The answer to this question, not the cost per cubic foot, nor per schoolroom unit, determines the real, the actual value.

Nearly two years ago, the writer prepared a series of school-building utilization forms. One of these showed the manner and the extent of use of every schoolroom in a high-school building throughout the school day. In my posses-

¹Exclusive of foreign possessions.

sion are nearly two hundred copies of this particular form that have been filled out. I shall quote some summaries from a few of them. These cases have been taken largely at random. To make the showing more conclusive, however, they were taken from a collection representing the large village and city high schools.

The first blank tells the story of an old building in a city of some 40,000. Exclusive of special rooms, such as gymnasium, auditorium, study rooms, laboratories, vocational and home-economics suites, it shows a room utilization of 76 per cent and a pupil-station utilization of 62 per cent. In 19 rooms, the percentage of use was not above 60; in 7 it was not above 50; in only 2 instances did it reach a percentage of 80.

The next case is a building planned some six or eight years ago. It shows 75 per cent room utilization in its 20 general classrooms, and 55 per cent, utilization of pupil stations. The lowest rating is 11 per cent; the highest is 71 per cent.

A third case shows 79 per cent room utilization, and 55 per cent pupil-station utilization. One room runs as low as 10, one 35 and one 39 per cent. One is 82 per cent. None is higher than 68 per cent.

A fourth case is a building of the past decade to which more intelligent study was given in regard to the needs and planning of programs than is common. It shows a room utilization of 95 per cent, and a pupil-station utilization of 68 per cent.

Some Failures and a Great Success

The next case gives a room utilization of 78 per cent, and a pupil-station utilization of 66 per cent. This building was constructed some 20 or 25 years ago.

A large village high school, constructed in 1924, shows a room utilization of 75 per cent, and a pupil utilization of 40 per cent. One room has a capacity for 50, with an average use under 25 pupils. The largest class is 29. Two other rooms have a capacity for 40, with a total average of 19. The largest registration in either room is 25.

Another city school, constructed in 1921, gives a room utilization of 91 per cent, and a pupil utilization of 62 per cent. Some of the classrooms have a capacity of 48 to 53 pupils, with class averages ranging from 22 to 28.

A still further case has a room utilization of 58, and a pupil utilization of 38 per cent exclusive of two rooms for which no use has yet been found, although the building was constructed in 1926.

The last case I shall mention is a building constructed in 1913. This is a case I have selected from a group of some ten or twelve for comparison and contrast with most of the others. *It gives a room utilization of 94 per cent and a pupil-station utilization of 87 per cent.* In this last case, the services of a highly trained schoolman entered into the planning, a man who is still going full steam ahead with 54 years of highly efficient service to his credit. Most of the former structures were well built, and of high-type construction, but the architects did not have the aid of an educational expert of rich and varied experience to study the needs and to draw up a building program to meet them.

These typical illustrations serve to give some idea of the scope and importance of the work that needs to be done in fitting a school to the needs of a community. Many other similar cases could be cited and much additional information could be presented were there opportunity. Suffice it to say that, in my opinion, the most promising way to reduce costs is through the rectification of such conditions as I have described, by giving adequate attention to functional service and the development of plans with a reasonable degree of flexibility to meet the specific needs of each individual case.

The Duty of States and of School Boards

The method of procedure described has recently received much impetus. Special credit is due the officials charged with the supervision of schoolhouse planning in those states that have established such Divisions in their state education departments and in some of the large cities that maintain building departments with facilities for rendering this type of service.

School boards must be impressed with the responsibility resting upon them in the expenditure of the vast amounts intrusted to their care. It is their bounden duty to safeguard and promote to the utmost the interests of the children under their guardianship and the welfare of the community and of the state whose servants they are. They must be led to understand and appreciate how important it is to have trained specialists in schoolhouse construction, make a thorough survey of their educational needs, present and prospective, and to submit carefully developed programs and schedules designed to fit those needs in the best possible manner. They must be persuaded that such procedure will pay, that it will assure better buildings, lower costs, and wiser expenditure of public monies. In divers ways and by various means and methods, public opinion should be educated and public sentiment awakened to the benefit and profit of this obvious way of increasing values while lowering costs. When there comes to be a genuine and general demand for this service, the supply will be forthcoming either through legislative action or otherwise.

The Architect as a Factor

We are not unmindful of the fact that the architect is an important factor in school construction. It is impossible to do without him. But there are architects and architects. Building costs in the aggregate would be lowered, and better standards would be maintained, were competent and conscientious men employed. Consideration should be rigidly restricted to men of integrity, high ideals, good training, and wide, successful experience in school construction. They should be men who, in planning, are willing to give the child preëminent place, men who have the reputation of keeping within their appropriations, and whose bills for extras are negligible.

It may not be amiss to mention certain types of architects who should never be given the opportunity to sign their names on the dotted line. High standards, reasonable costs, and good values are at issue and should be conscientious-



THE SCHOOL PRINCIPAL

To challenge the confidence of his teachers, the principal must have a comprehensive, definite knowledge of the supervisory technique of the instructional work in his field, he must be well read, he must travel, he must attend educational and civic meetings, he must take his share in community leadership—all of which takes time, energy, study, and salary. It follows that principals should have the time free from teaching and clerical duties in order to give them the opportunity to make all this needed preparation.

The helpful principal is one who stimulates the teacher to use her own initiative and originality, and who tactfully gives all the aid necessary to keep the teacher's work scientific, according to the latest and best standards there are for evaluating school instruction. Because the demands on the principal's time are so varied and numerous, it becomes imperative that the principal plan his time most carefully if the most important of all his duties be not encroached upon—that of supervising instruction.—C. A. Waltz, Superintendent of Schools, Mansfield, Ohio.



ly safeguarded. Some of these types are as follows:

1. The architect who values his service at one half or two thirds of the standard rates. They value their service too highly—they are dear at any price. Cut professional fees and you cut standards and service. That is expensive.

2. The architect who advertises "his wares" by claiming the ability to construct buildings cheaper than anyone else. He may be relied upon to construct cheap buildings, buildings that are certain to prove dear—dear in life span, dear in operation, and in upkeep, dear in appearance and inspirational uplift, and dear in service both to teachers and pupils. You get what you pay for.

3. The architect who is without vision, to whom the use of graceful lines and pleasing proportions are an unknown and an untried art, whose boxlike structures are an offense to the eye and a blot on the landscape. The school is for the child, and as the child is strongly and inevitably influenced by his surroundings, the school that fails to appeal reasonably well to his innate love of the beautiful costs too much.

4. The architect to be avoided is the one who is given to the furtherance of his own interests, rather than to the interests of his constituents; who, to increase fees, takes advantage of every opportunity to put into his plans "all the traffic will bear"; or the one who is committed to ornate exteriors to advertise himself, at the expense of the children who are consequently sentenced to live in plain, unadorned, gloomy interiors.

I might mention still other types of architects whose services could well be dispensed with, for example, those who have stock plans for sale, those who have the reputation of securing contracts through other means than personal worth and merit, those who act in collusion with contractors or dealers in materials and equipments, or those who are reputed to stand ready to give a *quid pro quo*. Personal greed should not be allowed to fatten itself at the expense of youth.

Some Other Efficiency Factors

Personally, I place such a high value upon the services of architects in school construction, that I would welcome a law barring any architect from employment in public-school work, who has not met a high standard of requirements for registration and who in addition has not bound himself to adopt and practice the code of ethics prescribed by the American Institute of Architects.

I should like to discuss other phases of school planning that need close intelligent supervision, phases that have a direct and important bearing on school costs and standards. The selection of the site, the adaptation of plans to the site, the form, shape, and dimensioning of the building, the number of stories in a given case, the reduction of room areas, particularly special rooms, through the intelligent selection and economic placement of furniture and equipment, these all have a large place in school planning and fall within the province of the educational adviser in cooperation with the local officials and architects. These interests have a material effect upon the costs of a school plant and the ease and efficiency of its administration. Then, too, the system of organization, the economy in the utilization of facilities, and the length of the school day have a direct and positive bearing on school costs. Hence, these features need to be carefully considered and weighed in school planning.

In conclusion, I should like to stress the view that if the course that I have outlined, were universally adopted in the study of school needs, the preparation of school-building programs and schedules, and the employment of school architects, school costs would be substantially lowered, and school standards not only maintained but constantly raised.

Some Observations on State Boards of Education

Homer L. Humke, Evansville, Indiana

The functions, organization, and political aspects of state boards of education seem to be well established if the fact that but few changes have taken place during the past ten years may be considered significant. These bodies are principally made up of lay members, though there seems to be a tendency to add ex officio members, particularly professional educators. Their duties as prescribed by law are varied, to a large extent policy-making, but also routine, directive, and corrective.

The data presented here were gathered from the respective state departments of education, largely by correspondence. Where facts seemed to be inadequate or uncertain, the school laws, state reports, and three important earlier studies¹ of general subject were consulted.

In 1920 there were 42 states with full functioning boards. This number was reduced to 40 by 1930. At the present time, Iowa, Nebraska, Ohio, and South Dakota have boards of education with restricted functions. Illinois, Maine, North Dakota, and Wisconsin do not have state boards.

Boards with Restricted Powers

In Alabama, Kansas, and Idaho there are dual boards, one for academic education and one for vocational; or one for elementary and one for secondary schools.

Other states have boards with restricted powers. The board in Iowa is in charge of state institutions of higher learning; the Nebraska board administers the state normal schools. In Ohio and South Dakota the board administers vocational education. Illinois and Maine have special legislative boards for the management of vocational education. North Dakota and Wisconsin have no state body functioning in any capacity in educational matters.

There has been little change during the past decade in the number of members. Seven states have increased the number of members, two states have decreased the number. Increases are: Alabama, 8 to 12; California 7 to 10; Louisiana, 6 to 11; Minnesota, 6 to 7; Pennsylvania, 7 to 11; Rhode Island, 8 to 9; Texas, 3 to 4. Vermont has lowered the number of board members from 5 to 3; Delaware from 5 to 4. The median number of members is now 7. This is also the mode, with 8 states at this number. Indiana has the largest number of members, 13.

Eight states have no ex officio members on their boards of education. The boards of 9 states are composed entirely of ex officio members. The median for the number of appointed members is 5, for ex officio members, 2. In 19 states the state superintendent is a member of the board, the governor in 17 states. Ten years ago the governor was a member in 18 states, the state superintendent in 29. Appointed members are named by the governor in 21 states, in 8 of which he is also a member of the board. Thus the governor has influence upon education in 30 states. (The above data includes such boards as exist in Iowa, Ohio, and South Dakota.)

Membership of Boards

The study shows a total of 290 members of state boards of education in the 48 states. Of this number, only 78 are reported to be engaged in educational work. There are 29 lawyers on boards of 11 states; 11 business men are on 9 boards; 10 housewives on 9 boards. The total number of women members is 13. In a few

states the law requires that a woman be appointed to the board of education.

Six years is the median and mode for the length of term—11 of the 35 states reporting on this item have a term of this length. Nevada has a tenure provision. Terms in California range from 1 to 4 years. Arizona has indefinite tenure. In the past ten years there have been changes in the length of term in 8 states, 6 of which shortened the period.

The distribution of legal term lengths is as follows:

Years in Term	1	2	3	4	5	6	7	8	9	10	Varies	No Report
Number of States	0	2	1	8	6	11	2	2	0	0	3	5

Eighteen states reported overlapping terms, 12 report no such provision. One report is uncertain, and 9 make no report on this item. (The four states with special boards are not included.)

Five states pay a salary, 11 pay per diem, 20 pay hotel, and 24 travel expenses. Two states, Delaware and Alabama, report a maximum number of days. The state superintendent of Missouri reports that the board seldom has a meeting.

Pay Nominal

Payment in the various states is as follows: *Expenses only*—Arkansas, Arizona, Connecticut, Kansas, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Virginia, Washington, Wyoming.

Expenses and \$4 per diem—South Carolina, Utah, Vermont.

Expenses and \$5 per diem—New Mexico, Tennessee.

Expenses and \$6 per diem—Oklahoma.

Expenses and \$10 per diem—Alabama, Minnesota, Delaware.

Expenses and \$15 per diem—California.

Traveling expenses and \$10 per diem—Louisiana.

Salaries per annum—\$100 and necessary expenses, Idaho; \$250 and expenses not exceeding \$200 for four appointed members, Georgia; \$1,000 and expenses for appointive members and advisory council, West Virginia.

Continuous service on a state board may or may not be a good thing for educational interests, but long years of service by one or two members would seem to be desirable. In only a few states do members have long records of service. The longest recorded period of service is in Rhode Island where the Honorable Frank Hill has served for 33 years. In Indiana, President William L. Bryan of the State University has served continuously for 29 years. Colonel E. Charles Francis has served 21 years in Rhode Island. Eighteen years have been spent on boards of education by Superintendent Frank Cody in Michigan and Superintendent C. B. Ijams of Tennessee. The Honorable Arthur W. Hewitt, governor of Vermont, has served on the board of that state for 16 years.

Apparently the only states which have made a practice of keeping members longer than the usual 4- to 6-year term are Connecticut, Idaho, Indiana, Kansas, Tennessee, and Utah. Of these, Indiana and Kansas are the only states with boards predominantly ex officio.

Relations with State School Executive

Thirty-four states indicate that the state superintendent or commissioner of education holds an official relationship on or to the state board. In 13 states the superintendent is secretary, in 7, executive head, in 4 he holds both

positions. In 10 states he is chairman or president of the board. It is evident that the matters of educational administration have not been delegated in any large measure to the expert in charge of educational matters in the state.

One change in the powers and duties of state boards within the past 10 years has been the matter of certification of teachers. In 1920, there were 23 states which were in some manner directing certification. It is evident that in many cases this did not mean direct certification by the state department. Twenty-seven states reported this power in force in 1930.

Smith-Hughes vocational-education administration has increased from 13 to 23 states. This is due to the gradual acceptance of the provisions of this act. In some other states this work is administered by a separate board.

Selection of textbooks by the state board is a duty in 17 states today, while 15 state boards exercised this power in 1920.

A significant change has been in the matter of teachers' salaries. No states reported exercise of this power in 1920, while 16 states reported it in 1930. Legislative action in this field has provided increases and minimum-salary standards for teachers. The administration of these laws has been placed in the hands of state boards of education.

The various powers and duties of state boards are distributed as follows:

Number of States	Powers and Duties
11	Distribute funds to several counties or corporations.
11	Make all apportionment of available funds.
5	Invest permanent public-school funds.
2	Create new school districts.
11	Grant state aid to approved schools.
9	Make regulations and rules for apportioning allotment of funds.
11	Make rules and regulations for special state aid.
1	Grant funds to state higher institutions.
23	Direct Smith-Hughes federal vocation.
7	Appoint commissioner of education.
13	Appoint assistants in department of education.
10	Determine tenure of assistants in the department of education.
12	Determine salaries of assistants in the department of education.
17	Make rules and regulations for the government of the board.
14	Make rules and regulations for executive officers.
11	Direct as a board the carrying out of educational policies in the state.
18	Establish policies of education in the state.
19	Direct the work undertaken by the department of education.
9	Make a budget for the department of education.
8	Approve the budget of the department of education.
0	Supervise the direction of state penal institutions.
0	Supervise the direction of state charitable institutions.
15	Advise the legislature of educational needs.
5	Supervise, classify, standardize, limit nonstate educational enterprises in the state.
27	Determine the conditions for the certification of teachers.
2	Standardize sanitary appliances for the schools.
17	Select textbooks for the schools.
10	Award contracts for the state textbook.
5	Enforce child-labor laws.
7	Supervise rehabilitation.
44	Publish annual or biennial reports.
16	Fix salary schedules for teachers.
12	Direct pension funds for teachers.
3	Control of state schools.
3	Provide teachers' institutes.

From the foregoing it would appear that the most notable changes in powers and duties of state boards of education have been in regard to the certification of teachers and in the administration of the teacher salary schedule.

¹State Boards of Education, by Kalbach and Neal, U. S. Office of Education, Bulletin 46 (1920). *State Boards of Education*, a thesis by P. J. Bardon, 1927, University of Washington. *Report of the Kansas State Code Commission, 1929.*

A SCHOOL-ADMINISTRATION BUILDING

Vancouver Enjoys a Memorial Building

The need of the administrative departments of local school systems for better housing has been met in recent years in a considerable number of cities by the erection of administration buildings. School boards have quite generally approached the problem in a practical way and have not been averse to making use of a physically sound school building which has outlived its usefulness for one or another reason. In communities fortunate enough not to possess a white elephant of an old schoolhouse, model administration buildings have been erected to express architecturally the dignity and importance of the schools as a governmental and social factor in the upbuilding of the community. In a very few towns have the boards of education received a gift of a building which is suited to school-administrative uses. Vancouver, Washington, is such a town.

In 1921 the American Legion of Vancouver obtained subscriptions of \$100,000 for the erection of a hall and clubhouse to be dedicated to the memory of Arthur Smith and Emory Reynolds, two Vancouver young men who had been killed in the war. Because of an unfavorable business the Legion was unable to realize on the subscriptions, and sold the new building upon completion to the city of Vancouver for the sum of \$35,000. The municipality proposed

to use it for city-hall purposes, but it was found that sufficient office space could not be arranged for. The city therefore built a municipal building, and the Memorial Hall remained empty except for occasional meetings.

In the early spring of 1931 the building was

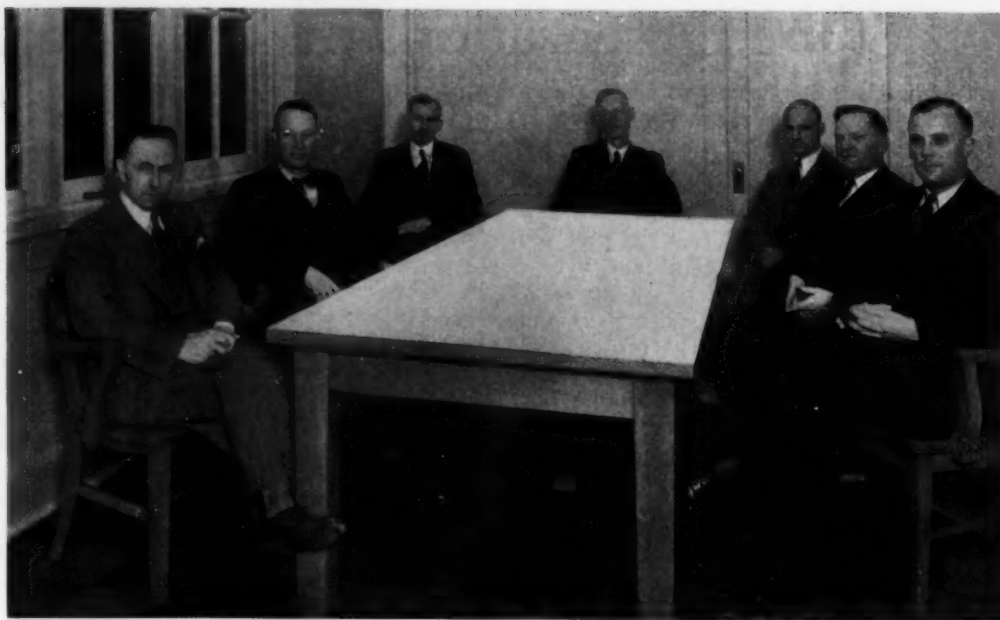
offered to the school district and on July 1 was accepted by the board of education.

The Memorial Hall is located at 13th and Broadway, close to the business district of Vancouver, and near the geographic center of the city. It is readily accessible from all the school buildings.

The building is of brick and concrete construction with wood-joint floors, partitions, and roof. The basement, which is well out of the ground at the rear, contains a large swimming tank, dressing and locker rooms, showers and toilets, a kitchen and serving room, storage space, and boiler and fuel rooms. On the main floor there are a social hall, called Smith Hall; a gymnasium, known as Reynolds Halls; a suite of offices for Mr. DeGaris Reeves, superintendent of schools and for L. C. Matson, secretary of the board of education.

It is the plan of the board of education to operate the building for general administrative as well as community-center purposes. Meetings of the teaching corps, lectures, and other school activities will be held in harmony with previous policies. The business of the school district—purchasing, accounting, records, handling of supplies, and management of the school plant—will center in the secretary's office.

(Concluded on Page 95)



VANCOUVER, WASHINGTON, SCHOOL BOARD IN SESSION
LEFT TO RIGHT: Supt. DeGaris Reeves, Ralph Dickson, Director; H. D. Warren, Director; S. M. Barnard, President; Lloyd Matson, non-member Secretary; Harry Craig, Director; Louis Schaeffer, Vice President.



INTERIOR OF SMITH HALL, MEMORIAL BUILDING, VANCOUVER, WASHINGTON



MEMORIAL BUILDING, SCHOOL HEADQUARTERS, VANCOUVER, WASHINGTON

The 1932 School Budgets

J. W. McClinton, Executive Secretary,
National School Supply Association, Chicago, Ill.

What of 1932? That is the question that has been ringing in the ears of school executives everywhere. Thanks to the leadership of the educational group, to the broad vision of our school-board fraternity, and to the educationally minded public, there is every evidence that our public schools are being safeguarded against undue retrenchments.

School administrators have exercised rare judgment in recognizing that some economies are essential. At the same time, they are also recognizing what is equally important—that there should be no stampede, no hysteria, and no wholesale reductions, to the end that the school systems built up through years of community effort shall not be permitted to become disorganized or chaotic.

Some readers may be amazed that so healthy a condition does exist. Here is the evidence. A miscellaneous group of towns and cities was selected in each state. School officials in these towns and cities were asked whether their 1932 budgets would be increased, or decreased, as compared with 1931. Replies were received from 46 states. A compilation of the returns showed that the average of all the proposed increases and decreases in school budgets gave a net decrease for 1932 of only $4\frac{1}{2}$ per cent, as compared with 1931 budgets. This is the brightest and most optimistic news that has come to light for some time. Educators and boards of education should take courage and the public may well exclaim, "well done, good and faithful servants."

Readers who may feel that the national average is not representative will be heartened to know that no section of the country shows to any great disadvantage. In the North Atlantic division, the average for the proposed school budgets is $3\frac{1}{3}$ per cent less than in 1931. In the South Atlantic states, it is 3 per cent less; in the North Central states, it is $4\frac{1}{2}$ per cent less; in the South Central states, it is 10 per cent less; in the Mountain states, it is $5\frac{1}{2}$ per cent less; and in the Pacific states, it is $\frac{3}{4}$ of 1 per cent less.

A School Economy Program at Mansfield, Ohio

C. A. Waltz, Superintendent of Schools

Mansfield, Ohio, is a city of approximately 35,000 population, with a public-school enrollment of 6,300, and a teaching staff of 218.

About a year ago, the board of education and the superintendent of schools began preparations for meeting a possible deficiency in funds which they knew was coming through a reduction in tax valuation. Now it has come, and the city has been reduced from a tax valuation of \$79,000,000 to one of \$54,000,000, or in other words, a cut of \$25,000,000. This means a reduction in school funds of approximately \$83,000. The problem confronting the school authorities was to meet the situation in a way which would work the least hardship on the school children of the city.

A Survey Made

A survey was made covering every phase of the school expenditures. At the outset, semi-annual promotions were eliminated. Of course, the saving in this was very little, for the first year. The teachers' rest periods in the junior and senior high schools were eliminated; the size of classes was increased; and some subjects of the curriculum, such as history in grades four and five, were eliminated. Expenses in the service department were reduced by approximately \$23,000. This was accomplished by de-

creasing the janitors, and by rigid economy in every expense item in this department. The reductions in these items were as follows: Janitors' payroll, \$7,200; office supplies, \$500; personal service, \$300; materials, \$500; replacement, \$600; repairs, \$2,000; purchase of lands, \$8,000; equipment, \$4,000.

In the senior high school, an attempt was made to reduce the teaching staff, without working a hardship on anyone. The places of five teachers who had resigned were not filled, due to the abolishment of the so-called rest periods. The saving here was approximately \$12,000.

In the other departments of the schools, a saving of \$15,000 was effected through the replacement of teachers who had resigned or retired. The abandonment of three one-room buildings on the outskirts of the city, and transportation of the pupils to the city, saved \$2,000, and gave the children better school facilities. Two elementary schools were placed under one full-time supervising principal, with a saving of \$2,500. This plan has worked satisfactorily.

Salary Reductions Minimized

In only two cases were salaries of teachers on the staff reduced, and then only because the



VIERLING KERSEY RESIGNS

Vierling Kersey has resigned from the state superintendency of public instruction of California to accept the superintendency of the schools of Long Beach, California, at a salary of \$10,000 a year. The state position pays \$5,000 a year.

salaries were out of proportion to those received by other teachers. Other small economies brought the total saving to at least \$83,000, which was lost by the reduction in tax valuations.

The schools have been operated for three months on this basis, and so far there is no evidence of a loss in efficiency or enthusiasm in the entire school organization. In fact, this has been one of the best years in the history of the local school system. The teachers, the employees, and the public have entered into the spirit of making this an outstanding school year in the city.

Considerable thought has been given this year to the possibilities of making further eliminations of subjects from the curriculum. There is no question that subjects have been foisted upon the schools, without the necessary study to determine whether these subjects or activities were justified in cost by the values returned.

It is believed that many eliminations can be made from school costs, and most of them of a permanent nature, without seriously handicapping the work of the schools. As a result of the far-sighted plan carried out by the board of education, the budget commission has declared that the financial picture of the local school system is the best in the county, and perhaps, one of the best in the state. Consequently, the schools will continue for the full nine months, and the salary schedule will be retained intact.

SCHOOL-BOND SALES IN 1931

School-bond sales in 1931, as well as all bonds for the construction of new school buildings, amounted to \$4,675,549 during the month of December. In the State of New York, bonds to a total of \$1,100,000 were sold, and Iowa sold only \$2,000. Twenty-six states reported no sales whatever.

The interest at the close of the year 1931 was 4.87 per cent. This is the highest figure reached by school bonds since 1921, when the average was an even 5 per cent.

The total school-bond sales for 1931 was \$178,288,073. New York state again dominated the year's activity, with a total of \$78,642,900, or 44 per cent of the total sales for the country. Pennsylvania was next, with total sales of \$14,430,100.

The school-bond sales by sections of the country were as follows:

North Atlantic.....	\$112,249,400
South Atlantic.....	11,249,489
North Central.....	27,963,071
South Central.....	11,468,597
Mountain	7,829,700
Pacific	7,915,933

The total sales reported for 1931 were \$89,625,114 under the total sales for the previous year.

THE AMERICAN School Board Journal

EDITORS:



WM. GEO. BRUCE

WM. C. BRUCE

The School Superintendent as an Educational Leader

IT WOULD seem quite natural that the current literature on school administrative topics emanated in the main from those in direct charge of the public schools. While this is apparently true, it must be admitted that the college instructors on school administration make a considerable contribution to the subject.

Some of the college professors have been inclined to draw conclusions as to the quality and quantity of educational leadership as measured by the contributions made to the current educational literature. Such literature may be classified in the purely professional discussions and those which concern themselves with administrative problems.

"It is probably safe to assert that the principal force for educational leadership in America is being exerted through the columns of the educational periodicals," says J. R. Shannon, of the Indiana Teachers College. If this be true then the question resolves itself upon the character of the contributions made to the current educational literature, and by whom made.

The same authority digs into the question and finds that the contributions made to the ten leading educational periodicals are written by college instructors, local administrators, and classroom teachers. Here he learns that while articles on professional topics are largely written by instructors, including classroom teachers, the discussions on school administrative problems come from both the college instructor and the local school administrator.

The relative proportion of the contributions made by college instructors and local school administrators is well illustrated in figures presented by Mr. Shannon. He finds, for instance, that between the period of 1926 and 1930, inclusive, the SCHOOL BOARD JOURNAL published a total of 1,073 articles of which 274 were written by college instructors and 317 by local school administrators. Under the latter classification we include school superintendents, high-school and elementary-school principals.

The statement was recently made by a Columbia University professor that the American city schools lacked in educational leadership. Not more than a half dozen school superintendents, he held, had risen above mediocrity. The statement is readily refuted in the fact that in the national councils of educational endeavor the city superintendent looms up as a dominating influence. There are scores of powerful leaders in control of the country's system of popular education.

But, measured in the light of current educational literature, we secure an equally encouraging picture. While the college instructors on school administration are liberal producers of literature dealing with the economic and executive phases of school government, those in direct charge of the several school systems lead at least in the number of contributions made to the subject. Nor are these lacking in merit.

It is not the purpose here, however, to make comparisons between the service rendered by the several classes of writers on modern school administration, but to point out that the American schools do not lack in educational leadership. The superintendents of schools, as well as the principals of high and elementary schools, are busy men who are constantly weighted with the exigencies of duties and responsibilities of executive labors. They do not have the leisure hours for research and study that befalls the college instructor, hence the inference must be that they are less productive in a literary sense.

The American school administrator, measured by the impress he is making upon the schools under his charge, his writings as they

appear in the current educational periodicals, and the contributions he is making in the state and national councils of education, must be recognized as a leader of originality, force, and achievement. The progress made by the nation's schools fully substantiate this claim.

Discovering New Tax Sources for School Purposes

IT HAS become a gratifying fact that the educational leaders who have concerned themselves with the question of school support have gradually turned their attention to the subject of taxation. This is in line with a departure championed by the SCHOOL BOARD JOURNAL for a number of years. While educators have urged from time to time the need of adequate school support, they have also equipped themselves with knowledge that will enable them to suggest where such support must come from. Thus, there is found an increasing interest on the part of schoolmasters in the science of taxation and in the sources that can legitimately be tapped for an increased school support. In other words, the educator has aligned himself with the economist in the discovery of new tax sources.

Where the pressure for adequate support has become most acute, the effort to build up a more equitable and efficient tax plan than now in operation manifests itself in definite departures. Thus, the State of Indiana has engaged in a tax experiment which will unquestionably prove of interest in other states where the pressure for adequate school support is equally acute. The situations which prompted Indiana to look for new tax sources were the following:

"(1) The increasing cost of education; (2) decreasing assessed valuation found in almost half of the 92 counties of the state; (3) a very low state-tax rate; (4) a depleted state-relief fund; (5) an ever-increasing amount of wealth, changing into intangibles, which is very often not given in for taxation purposes; (6) many school officers who were not able to pay their teachers the monthly salaries as provided by law because of insufficient funds; and (7) a few hundred teachers, demanding their pay, as some of them had received no salary for periods ranging from six months to two years."

The result was the so-called chain-store law enacted by the legislature of Indiana which has been tested by the United States Supreme Court and has been declared constitutional. The school authorities of Indiana look upon this law as a distinct discovery of a new source of revenue. The new chain-store law exacts license fees as follows:

1. Upon one store, the annual license fee shall be three dollars for each such store;
2. Upon two stores or more, but not to exceed five stores, the annual license fee shall be ten dollars for each such additional store;
3. Upon each store in excess of five, but not to exceed ten, the annual license fee shall be fifteen dollars for each additional store;
4. Upon each store in excess of ten, but not to exceed twenty, the annual license fee shall be twenty dollars for each such additional store.
5. Upon each store in excess of twenty the annual license fee shall be twenty-five dollars for each additional store.

Whether the new law is an epoch-making departure in the field of taxation and thus may become a factor in the direction of school support, is subject to the test of time and experience. The enactment of a law is one thing, while the accomplishment of its objectives is quite another.

At any rate, the educators in other states who are concerning themselves with the subject of taxation, as a prerequisite to adequate school support, will watch the Indiana tax departure with more than ordinary interest.

The Economy Era in School Administration

THE problems which confront the school administrators throughout the country today involve the consideration of budget adjustments in the light of depressed financial situation. On the one hand, a reduced tax yield must be recognized, and on the other, the needs of the school must be met.

The real problem is how to maintain the efficiency of the school service upon acceptable standards. This can and must be done and,

as far as observation teaches, it is in the main being done. The thought that the process of popular education must go on in an undisturbed, aggressive, and progressive manner is firmly fixed in the minds of the American citizenship.

In discussing the situation in its more serious aspects it should be said that the financial pinch, as applied to the administration of the public schools, is confined to certain regions and communities only. There are states in which the problem of adequate support for all school districts has not as yet been solved. Thus some of the rural centers are in distress. Some of the industrial cities whose tax support is immediately affected by economic variations have found themselves confronted with the necessity of retrenchment.

While the larger centers of population have not escaped the general depression they have not been confronted, as far as the schools are concerned, with any acute or embarrassing financial situation. The bankruptcy of the municipality of Chicago, and the financial troubles which afflict the school system of that city are not due to the depression but attributable to a tax muddle.

It is here possible that a reduction in property valuations, and a consequent decline in tax income, may be reflected in budgets to be formulated this and next year. On the other hand, it is also reasonable to assume that the pending depression is temporary only, and that sooner or later it will be a thing of the past.

There is, however, one outstanding fact, which cannot be ignored and which the school administrator must recognize as well as all those who dispose of public funds. The entire financial structure, public and private, will henceforth be conducted upon a reduced status. If the cost of living, of labor and material is fixed upon a lower scale, it also logically follows that the cost of government ought to be gauged upon a lower basis. This implies the recognition of an economic law, which cannot well be combated. Besides, public opinion will assert its own demands.

The demand for the practice of reasonable economy is always in order. The cutting of a budget may hit the superfluous and unnecessary, the thing that may be dispensed without impairing the service, but that does not mean a departure from or invasion of reasonable economy. Thus it must be assumed that this is an era of adjustment, of cutting and slashing expenditures — an adjustment which recognizes new conditions brought about by new money values. If the dollar of today buys more than did the dollar of yesterday, the tax dollar expended by the school administrator is also expected to buy more.

The judicious school administrator is not readily stampeded into a trend of false economy. He meets the situation with calm and circumspection, holds firmly and loyally to the task in hand, and faces the future with confidence and with the American spirit of optimism.

Mayoralty Interference with School Administration

THERE are states in the United States in which the law gives the chief executive of the municipality a definite voice and vote in board-of-education deliberation. The thought here is that there ought to be a closer coöperation between the municipality and the school authorities. In some communities the notion prevails that the school body requires parental guidance and the mayor of the town is the man to do that guiding.

The same conception is to some extent entertained in cities where the mayor appoints the members of the board of education, subject to the approval of the city council. The law contemplates that when the mayor has made his appointments he has no further voice in the matter. The board of education is an entity with which the municipal officials, either mayor or aldermen, are not supposed to meddle.

Those who wield the power of appointment and of ratification have in numerous instances held that, since they have brought the school governing body into being, they must also govern its deliberations. Where this policy has prevailed, evil results have followed. It has made the administration of the school system subject to undue influences and has brought the control of the board of education and professional forces under the domination of city officials.

That city officials entertain the notion that they must exercise a certain supervisory authority over school-board members is once more illustrated in an editorial which recently appeared in the Fort Wayne, Indiana, *Journal-Gazette*, which reads: "Mayor Hosey objects to the responsibility of naming members of the school board and thereafter having no authority over that body. He cannot exercise arbitrary power to remove a member, nor has he the least to do with the counsels or the transactions of the board."

The position here taken by the chief executive primarily is a confession of weakness. Either he does not deem himself competent to appoint members of the board of education who possess character, ability, and a proper zeal for school interests, or else in his belief the community does not afford the type of citizenship capable of serving honorably and efficiently. He cannot consistently admit either one of these conclusions without casting a reflection upon himself or the community.

The expediency and merits of the appointive system rest wholly upon the wisdom, judgment, and honesty of those who wield the power of appointment. An unselfish approach to the task, having in mind the integrity and service of the school system, leads to the selection of a high type of citizenship for school-board honors. A board of education so chosen will cause no worry to those responsible for the same.

Expediency of School-Property Inventories

THE practice of keeping accurate and readily accessible records of the paraphernalia and equipment which find their way into the average schoolhouse has not as yet found the general acceptance that it deserves. The tendency of the day, in the direction of greater economy, also calls attention to the leaks and wastage which attend the housekeeping side of the American schools.

The reports from time to time exacted at the hands of custodians of school property reveal the constant losses resulting from thefts and negligence. In the wake of such reports greater vigilance is suggested, but it is seldom that a definite plan for remedy is proposed. A report recently submitted to the Chicago board of education contains the following:

"The lack of accountability and responsibility makes cases of theft a possibility. Just why should this be so? Because it is public property and no one cares. No one is held responsible for it. It does not cost anyone connected with the school system anything.

"If a chair has a leg broken, the whole chair is discarded and a requisition is put in for a new one. If the handle of a rake or shovel is broken, a new handle is not furnished, but a requisition for a new article is put through. What then becomes of the most expensive part of the tool? Who knows? Who cares? All we know is that we buy, buy, buy, every year. But, in many instances, no one knows whether the items are actually used or what becomes of them.

"It is true that we have a complete inventory of all supplies purchased and stored in the warehouse. But after these same supplies leave the warehouse on requisition furnished by the principal or department head, there is absolutely no attempt made to keep a record of the items or to hold anyone responsible or accountable for them."

The report then shows that during the past twelve months 946 typewriting machines were purchased at cost of \$58,500; 852 ladders at \$4,000; 9,180 brushes at \$20,000; baseballs and footballs at \$58,863; etc. Only thirteen items totaled a sum of \$155,274. There was no check on the actual supplies on hand, or the articles subject to repair, and the actual need for replacement.

The situation as found in the Chicago schools may be extreme, and hence not applicable to the schools elsewhere. But from information at command it remains that in a general way the classroom-inventory idea has not come into vogue to any considerable degree.

In the schools of Europe there is posted in every classroom an inventory of the equipment contained therein. No articles may be removed without the consent of the principal. A similar rule has been observed in some of the schools of this country.

There is probably no public institution in any community that is in a better position to set the pace in the direction of method and system designed to eliminate waste than is the local school system and to point the way to sound and acceptable business practices.

February, 1932

The Educational Hosts at Washington

Department of Superintendence and Allied Associations, February 20 to 25

Two significant facts make the 1932 convention of the Department of Superintendence, and of the allied educational associations and N. E. A. departments, of especial interest to school administrators. The crisis in school affairs brought on by the economic depression is the first serious setback which the present generation of educators has experienced. And, while there is no occasion for alarm, the situation is serious enough to require the most careful and painstaking study of ways and means for maintaining present standards and for imbuing the rank and file of teachers with an optimistic fighting spirit such as is fully warranted by the outlook. The second significant fact is the Washington Bicentennial, the celebration of which is properly centering in the capital of the Nation and has assumed an educational form that is overshadowing the patriotic and historic aspects. In a minor but no less important way, Washington—the seat of the executive, judicial, and legislative branches of the country's government; the historic center of much of our national life and power; the most beautiful city of the continent; the home of numerous educational institutions, scientific, patriotic, and social organizations—has attractions for every educator that will inspire him and aid in his important daily work.

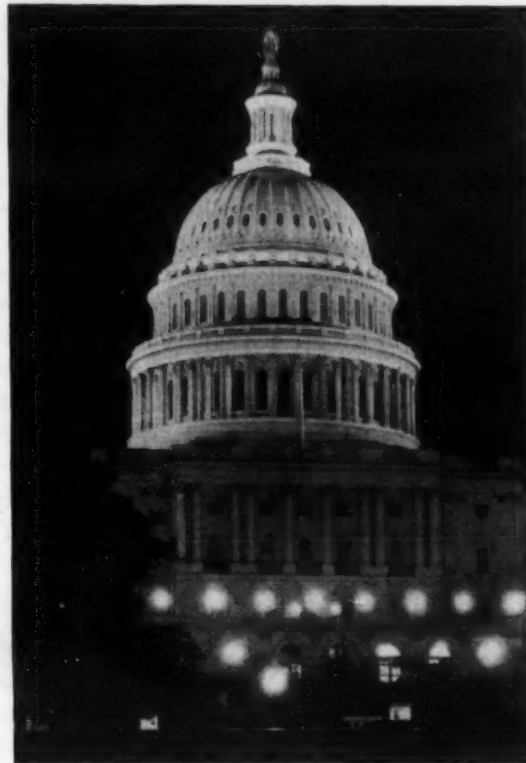
The Department of Superintendence

The sixty-second convention of the Department of Superintendence will consider education in the light of a "guide and safeguard" of American life.

A review of the 200 educational commercial exhibits, which it is expected will be the most extensive and informational in many years, will be opened officially at the Washington Auditorium, on Saturday afternoon, February 20, by the Department and N. E. A. officers.

The feature of the opening session on Monday will be a patriotic ceremony and a discussion of "Education as the Nation's Safeguard" by Dr. Charles H. Judd, Chicago. On Monday afternoon, there will be a pilgrimage to Mt. Vernon, in which the entire membership is expected to participate.

On Monday evening, the Department will break up into three sections. Members will be invited to attend a patriotic convocation of George Washington University, to be presided over by Dr. C. H. Marvin, president of the University. Under the leadership of Mr. James L. Moyer, of Boston, the National Commission on the Enrichment of Adult Life will hold a session. School-building planning and construction will be the subject of a session



THE DOME OF THE CAPITOL AT NIGHT

for interested educators and architects, to be led by Dr. E. T. Peterson, of the University of Iowa.

The Tuesday Sessions

The associated educators will, perhaps, be interested in no single meeting of the convention quite so much as they will be in the Tuesday morning session, which is to take up the problem of "The Present Crisis and Education." Pres. Edwin C. Broome, superintendent of schools of Philadelphia, will lead with a paper entitled, "The Crisis Defined;" and Supt. David E. Weglein, of Baltimore, Md., will talk on the subject, "How Shall the Crisis Be Met?" The final paper will be a discussion of "Improved Methods of Financing Education," by Mr. Russell Dearnont, Missouri state senator, Cape Girardeau, Mo.

It has been remarked during recent years that the most helpful and practical sessions of the Department are the administrative groups arranged

according to size of city, etc., for the Tuesday afternoon of the convention week. On February 23, the Department will break up into a dozen such groups for the discussion of vital problems.

The annual business session of the convention will be held on Wednesday morning and this will be preceded by addresses on "Art in Education," by Lorado Taft, of Chicago; "Music in Education," by Dr. Walter Damrosch, of New York City; and "Literature in Education," by Dr. J. H. Finley, of New York City. An important business report to be acted upon will take up "Lay Relations of Superintendents and Schools," to be presented by Supt. Charles S. Meek, of Toledo, Ohio.

On Wednesday afternoon, discussion groups according to important topics in education and educational administration have been arranged for. The session on Wednesday evening will be in the nature of a forward look to consider "Education as a Factor in a Changing World." Mr. Mark Sullivan, well-known political writer, will be the leading speaker.

Thursday Sessions

On Thursday morning, Mr. Ray Lyman Wilbur, Secretary of the Department of the Interior, will be the sole speaker. His discussion will take up "Education as a National Enterprise."

On Thursday afternoon "The Physical and Mental Life of School Children" will be the general topic for discussion. Speakers have not been announced.

Patriotic Aspects of the Convention

Running through the entire convention there will be a patriotic note, struck mainly in a series of pilgrimages to places made memorable by the life and deeds of Washington and other colonial heroes. At each of these gatherings and demonstrations, members of the Department of Superintendence and other educators will take the leading parts. The high points of these demonstrations will be at Mt. Vernon on Monday afternoon, and in the Washington historic pageant presented on Thursday night by a group of Washington citizens and school children led by Mr. P. J. Burrell.

The Allied Organizations

Fourteen allied organizations and departments of the N. E. A. will hold meetings simultaneously with the Department. These include the American Educational Research Association, to be presided over by Mr. J. L. Stenquist, of Baltimore; the Department of Elementary-School Principals, headed by Mr. Earl L. Laing, of Detroit, Mich.; the Department of Rural Education, in charge of Miss Kate V. Wofford, of Columbia University, New York City; the Department of Secondary-School Principals, led by Mr. C. H. Threlkeld, of South Orange, N. J., etc.

The Exhibits

In addition to the commercial exhibits, the U. S. Department of the Interior will offer an exhibit of government educational work in the main corridor of the Department of the Interior Building. This building is within a block of the Washington Auditorium and within two blocks of the Auditorium of the Daughters of the American Revolution. Approximately twenty federal bureaus and departments will exhibit under the leadership of the Office of Education. The display will give the visiting schoolmen a complete view of the various government agencies and activities bordering on or engaged in educational work.

As in past years, the Department will enjoy special railroad rates—one and one-half fare for the round trip. Tickets will be available only upon presentation of identification certificates to be obtained in advance.

The N. E. A. headquarters has issued a notice to the effect that hotel space in all the principal hotels has been fully reserved, but that ample space is available in the outlying hotels. Inquiries regarding sleeping-room accommodations may be addressed to Mr. Augustus Gumpert, Director of Washington Convention Bureau, 1730 H St., N. W., Washington, D. C.



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School Law

School Lands and Funds

A board of education's exercise of discretion is not reviewable by the court, except for a clear error in performance of a legal duty (N. Y. Education Law, § 300).—*De Angelis v. Laino*, 252 N. Y. S. 871, 141 Miscellaneous reporter 513.

A court cannot go beyond a board of education's determination that an emergency exists respecting school buildings, in the absence of a charge of fraud, capriciousness, or bad faith.—*De Angelis v. Laino*, 252 N. Y. S. 891, 141 Miscellaneous reporter 535.

School-District Government

A bank is held chargeable with a notice that the county board of education had not authorized a loan by resolution, and that contrary representations by the superintendent of schools were false (Ga. laws of 1919, pp. 322, 328, 329, §§ 82, 96, 101).—*American Surety Co. of New York v. Citizens' Bank of Colquitt*, 160 Southeastern reporter 546, Ga. App.

Whether a county superintendent of schools, making false representations as to authority to receive a loan, acted by virtue of the office, was held immaterial to relieve the bank (Ga. laws of 1919, pp. 322, 328, 329, §§ 82, 96, 101).—*American Surety Co. of New York v. Citizens' Bank of Colquitt*, 160 Southeastern reporter 546, Ga. App.

A bank making a loan to a county superintendent on a superintendent's false representations, without ascertaining whether the board of education authorized the loan, could not recover on the superintendent's bond (Ga. laws of 1919, p. 332, § 114, and p. 350, § 150, as amended by the laws of 1925, p. 250).—*American Surety Co. of New York v. Citizens' Bank of Colquitt*, 160 Southeastern reporter, 546, Ga. App.

School-District Property

"Repair," within the statute defining the power of school boards to repair and improve school buildings, means to restore to a certain state after decay

or injury. "Improve" means to turn to good account, to use to good purpose or advantage, to better (N. Y. Education Law, § 875, subd. 1, as added by the laws of 1917, c. 786, § 1).—*De Angelis v. Laino*, 252 N. Y. S. 871, 141 Miscellaneous reporter 513, N. Y. Sup.

A motorist, injured when a student on the school premises threw an orange through the windshield, was not injured by a dangerous or defective condition of the grounds or property, within the statute concerning the school district's liability (Calif. statutes of 1923, p. 675, § 2).—*Whiteford v. Yuba City Union High School Dist.*, 4 P. (2d) 266, Calif. App.

A statute makes a school district liable only for negligence, as regards a dangerous or a defective condition of the property (Calif. statutes of 1923, p. 675, § 2).—*Whiteford v. Yuba City Union High School Dist.*, 4 P. (2d) 266, Calif. App.

A student's throwing an orange from the school premises through the windshield of an automobile was held "willful misconduct," not "negligence," precluding a school district's liability (Calif. statutes of 1923, p. 675, § 2).—*Whiteford v. Yuba City Union High School Dist.*, 4 P. (2d) 266, Calif. App.

A statute making the trustees liable for judgment against the school district for negligent injury to a pupil could not be invoked by one not a pupil (Calif. school code, § 2.800 to 2.802).—*Whiteford v. Yuba City Union High School Dist.*, 4 P. (2d) 266, Calif. App.

School-District Taxation

A fund collected for school purposes and deposited by the city treasurer, was held property of the city, not of the board of education, so that the city was entitled to retain interest received from a depository bank (Wis. statutes of 1929, § 40.01 et seq., and § 40.53 (6)).—*Board of Education v. City of Racine*, 238 Northwestern reporter 413, Wis.

SCHOOL-FUND BANK DEPOSITS

The supreme court of Michigan, in a recent decision, has decreed that the deposits of school funds tied up in insolvent banks must be regarded as trust funds and hence treated as preferred claims.

Five rural-school districts jointly brought suit against the United Savings Bank of Tecumseh, Michigan, which had closed its doors. The bank held on deposit considerable sums of money belonging to these school districts.

The supreme court, in discussing the case, held that the state law required the banks to give depository bonds when so required. In this instance the bank had refused to issue such depository, hence the school deposits become trust funds. The court said:

"There are many authorities which hold that the unauthorized or unlawful deposit of public funds in a bank knowing them to be public funds and which later becomes insolvent creates a trust relationship in such funds between its owner and the bank.

"Public funds, received by a bank with knowledge, actual or constructive, that the essential statutory requirements for the deposit thereof have not been complied with, are impressed with a trust ex maleficio, if they can be traced. . . ." In re *North Missouri Trust Co. of Mexico, Mo.*, v. *Commissioner of Finance*, 39 S. W. (2d) 415.

"But if the (public) funds have been deposited in violation of law or without authority, the claim of the Government is preferred. The basis of this rule is that a trust results from the wrongful disposition of the funds." 22 R. C. L. 230, citing cases.

LAW AND LEGISLATION

♦ The Detroit board of education retired an electrical worker because he had reached the age of 70. Thereupon the worker brought suit on the plea that under the veteran's act he could not be retired. The Michigan Supreme Court ruled that the act in question did not apply to school employees and that the board of education was within its rights to retire the veteran.

♦ The circuit court at Montgomery, Ind., has awarded A. D. Montgomery, formerly superintendent of schools of Crawfordsville, damages in the amount of \$5,558, which represents a year's salary with interest. The decision followed a suit begun by Mr. Montgomery to collect his salary and damages from the school board which had dismissed him from the school service.



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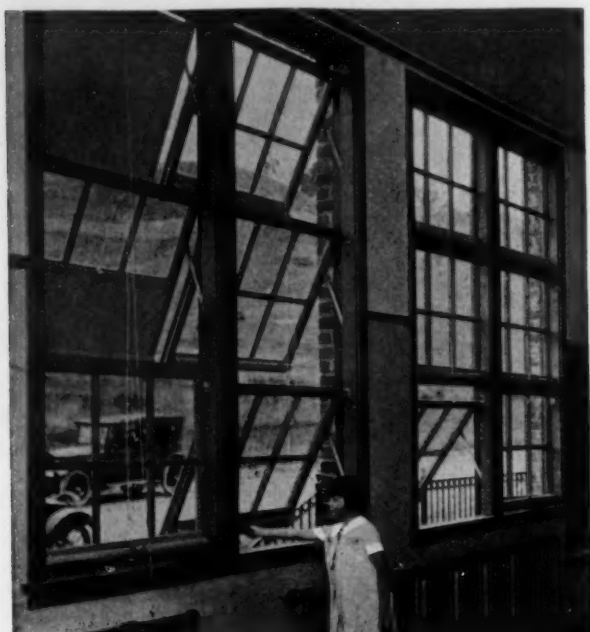
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School Building News

ORIENTATION OF SCHOOL BUILDINGS

No school building can be well lighted if it is not first properly placed with reference to the cardinal points of the compass. If a building is so placed on a lot to make it necessary to locate the windows in the classrooms to face toward the north or the south, neither the required amount of glass surface nor the correct setting of the windows can overcome the difficulties introduced.

Mr. L. T. Tustin, writing in the *West Virginia Education News* for November-December, 1931, discusses the subject of orientation, pointing out that the fundamental demands of health, rooms for special work, and cloakrooms and toilets, all require proper lighting at all times. He writes:

"The fundamental demands of health require the purification of a classroom by direct sunlight; but it is also necessary to introduce this all-important purifying agent in such a manner as to prevent as far as possible the direct rays of the sun from falling on the desks and books of the pupils while they are engaged in study. If the windows of a classroom are placed on the north side of a building located in any section of our state, very little direct sunshine will ever enter, and during the school season practically none, for the sun's path is then too far to the south. Direct sunlight is the most powerful and reliable disinfectant known, and it is running contrary to one of the best-established principles of hygiene to construct a school building in such a manner as to fail to get this value of direct sunlight.

"True, in large buildings devoted to high-school or technical education some special rooms are needed for artwork, and for those the north light has an advantage because of its quality. North light is soft and produces more artistic shadow effects than light from any other direction. But these rooms are not as wholesome as those receiving direct sunlight, and are allowable only for short periods during the day. For ordinary classrooms,

where children remain at work during the whole day, dependence on north light is a serious error.

"Many reasons could be given why classrooms should receive light from but one side; it is sufficient here to state the fact that unilateral lighting is universally recommended in all locations where light is not impeded by tall buildings, a dirty, smoky atmosphere, or any other serious hindrances. In cold climates it is not best to depend on windows facing toward the north, because it is more difficult, and consequently more expensive, to heat these rooms. They are not only exposed to the direct winds from the north, but they fail to get whatever available heat the direct rays of the sun carry. By reason of these two handicaps a schoolroom so situated may require in cold weather 10 to 20 per cent more fuel than one getting east or west light. Of course the effect of the wind will depend to a great extent on the construction and location of the building. A building with walls made of porous brick or wood will show greater leakage than one whose walls are of cement or of hard brick. But while these difficulties suggest greater expense, they are not of so much importance from the health point of view as the dangers due to lack of sunshine. For the sake of health every schoolroom should receive a 'sun bath' every day the sun shines.

"Doubtless some who realize the great hygienic importance of sunlight have concluded that classrooms facing toward the south are the most acceptable. This conclusion would be warranted were it not for the fact already mentioned. With direct sunlight streaming into a schoolroom during the entire school day, it is almost impossible to furnish proper light to all the pupils in the room. If, as is usually the case and probably will be for a considerable time to come, the desks are fastened to the floor, the pupils can do little to adjust their positions so as to avoid the painful and harmful effect of direct sunlight on desk or book.

"If shades are used, they will inevitably reduce the light in parts of the room below the normal demand, and hence some of the children will suffer for lack of light.

"The conclusion, therefore, is this: Be sure that no lot for a building is selected which will require

such an orientation of the building that it will be necessary to depend on south light for the classrooms; buildings for school purposes, especially for elementary classes, should be so planned and so located on a school lot that the classrooms may receive either east or west light.

In the construction of a small building there are some advantages of the east light over the west. First, an eastern exposure will permit the morning sun to take the chill out of the room before school begins. Second, it is probably true that there are in most parts of the state fewer cloudy mornings than afternoons, and hence those rooms having windows toward the east will get a better sunning than those with windows toward the west. In sections where foggy mornings are prevalent, the opposite would be true. In buildings with east exposure the troublesome direct rays of the sun will have nearly disappeared by ten o'clock in the morning. The shades can then be rolled up for the rest of the day. In the third place, the prevailing cold winds in the winter are more from the west and northwest than from the east.

"However, the correct choice between east and west windows will depend to a large degree on the surroundings. For example, if a school building must be placed near hills, mountains, or trees, it would be better to choose the west side for the windows, if the horizon line is high toward the east. If the opposite be true, the east side is preferable. A range of high hills or mountains often raises the horizon line so high that the sun may not appear above it until quite late in the day. Besides, even after the sun has reached the zenith, a mountain's side will not reflect back enough light to insure good illumination. A wide expanse of sky is necessary. It will be important then to study the surroundings, to note the possible hindrances and the general outlook in order to decide wisely whether the building should be placed to introduce east light or west light into the classrooms.

"Even when the difficulties with reference to lighting are for all practical purposes equal, other considerations may affect a decision. An attractive outlook from a classroom is better than an ugly one, and it sometimes happens that this considera-

(Concluded on Page 62)



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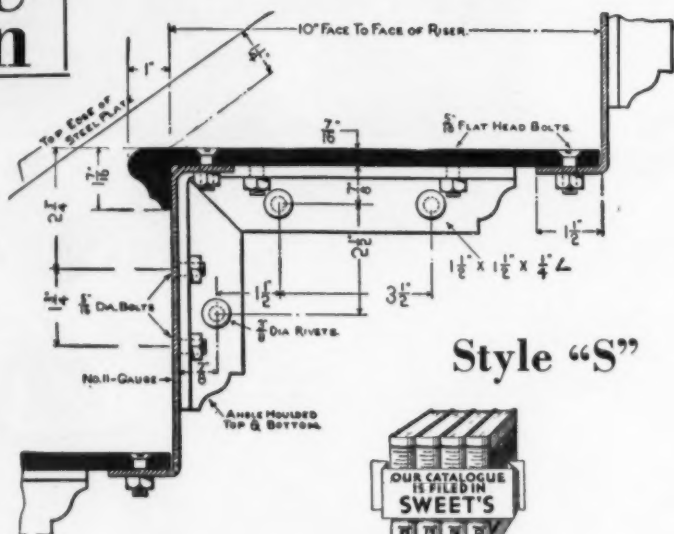
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(Concluded from Page 60)

tion decides the orientation when other things are equal. For example, if a lot must be selected near a busy, dusty roadway, much relief from the dust, noise, and disturbance may be secured by facing the windows in the opposite direction. On the other hand, the appearance of a building may demand the placing of the windows on the side from which the approach is made. All matters of this sort must be determined by local conditions. But it will always remain true in this state that it is better and safer to depend on east or west light for schoolrooms than on north or south light.

"There is another point worth mentioning and this favors west windows. Children seated in rooms lighted from the west will naturally face north, and are then in a position to read their maps without confusion. The cardinal points on the map will then agree with the realities about them. The top of the map will be toward the real north, the west side will correspond with the real west, and altogether the representation and the reality will be more easily connected.

"The discussion relative to orientation has been concerned with the proper lighting and sanitation of the classroom. The question of lighting workrooms, libraries, cloakrooms, and toilets, demands separate treatment, for in these rooms direct sunlight is not a disturbing element, and, in the main, the purifying influence of sunlight is more important. Unilateral lighting is not an essential condition in these rooms.

"Workrooms in general are decidedly better for receiving abundant sunshine, for here benches and tables should be arranged to suit the convenience of the students, and more individual liberty is necessary. The same is true of the library rooms. Toilets and cloakrooms require direct sunshine and abundance of light in order to keep them sanitary and wholesome. Proper orientation when applied to these rooms means provision for abundant light and as much direct sunshine as good sanitation demands."

BUILDING NEWS

♦ Cincinnati, Ohio. The board of education has saved several hundred thousand dollars through its

policy of carrying its own insurance on school buildings, according to a recent report of Mr. W. J. Shroder, president of the board. Under the plan, the board has paid out less than \$5,000 in the 19 years of operation, as against an estimated cost of \$32,000 for insurance premiums.

Mr. Shroder pointed out that the fund, which has grown on its own momentum, has now reached \$401,000. The interest will be allowed to accumulate, until the fund reaches \$500,000, after which interest payments will be transferred to the general fund for general school expenditures.

The plan was adopted in 1912, with a decision to allot \$12,500 yearly to a replacement fund, to replace buildings damaged by fire, tornado, earthquake or other reason. This allotment was later increased with the result that the fund reached the \$350,000 mark. Since that time, the fund has been allowed to grow through the accumulation of interest on the bonds which the board holds.

♦ Claremont, Calif. The high-school district has recently approved a school-bond issue of \$148,000 for an addition to the present high-school plant. The new unit will provide a large auditorium, as well as laboratories, a library-and-study-hall unit, domestic-art department, and rooms for the teaching of music.

♦ South Pasadena, Calif. The board of education has recently completed the erection of the Elliott Junior High School in Altadena.

♦ Bryan, Ohio. The school board will complete during 1932 its extensive program for the repair, repainting, and remodeling of the school buildings. The work, which was begun in 1930, will be completed during the next year.

♦ Boston, Mass. The school board has completed plans for an extensive school-building program covering a period of five years. The program will take up the erection of intermediate school buildings and is expected to eliminate the use of portables which now number 114. Under the new plan, portable buildings are to be used for temporary, or emergency use, to relieve inadequate school facilities until a new building is erected.

♦ Pawtucket, R. I. Supt. W. A. Newell, in his tenth annual report to the board of education, has

recommended the adoption of a building program to relieve congestion in many sections of the community. He has asked that new buildings, or additions to present structures, be provided for without delay to relieve the present pressure for additional school facilities.

♦ Cleveland, Ohio. The school board has provided relief for the more seriously congested schools as a result of a decision to start work in 1932 on additions to four schools, involving a cost of \$700,000. The cost of the new school construction will be borne by the $\frac{1}{2}$ -mill building-fund levy which normally produces \$1,000,000.

♦ The new Luther Burbank School, at Milwaukee, was dedicated with festive ceremonies. Miss Anna Millmann, principal, extended the welcome, Edward Schroeder, member of the board of education, described the school, and Supt. Milton C. Potter delivered the dedicatory address.

♦ Norfolk, Nebr. The school board has proposed a new grade-school building program comprising the erection of three buildings, and has called for a bond issue for the financing of the program.

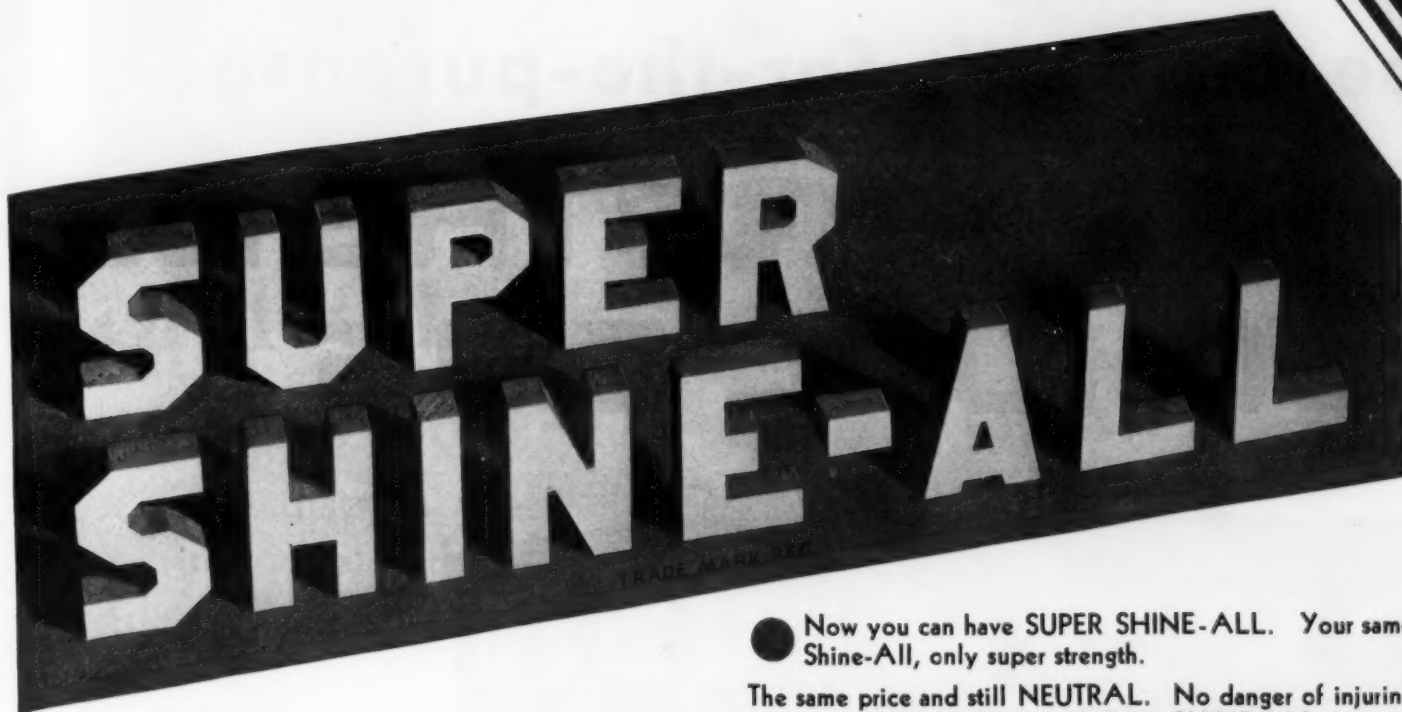
♦ West Walnut Manor, Mo. The school district recently approved a \$60,000 bond issue for the erection of a high school.

♦ Plymouth, Wis. The citizens recently approved a bond issue of \$160,000 for the erection of a junior-senior high school. This amount, together with \$100,000 that the municipal light and water board turned over to the city council for school-building purposes, will permit the erection of a building suited to the needs of the city schools. The building will be erected from plans prepared by Messrs. Martin Tullgren & Sons, of Milwaukee, Wis.

♦ New York, N. Y. The building bureau of the board of education has endeavored to speed up the construction program for new high schools as a means of eliminating the part-time problem in these schools. It has been found that the part-time problem is complicated by the increase in registration due to the unemployment situation. The program calls for four new high schools and additions to two further buildings.

Hillyard's Announce

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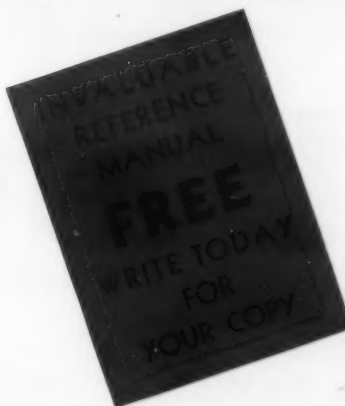
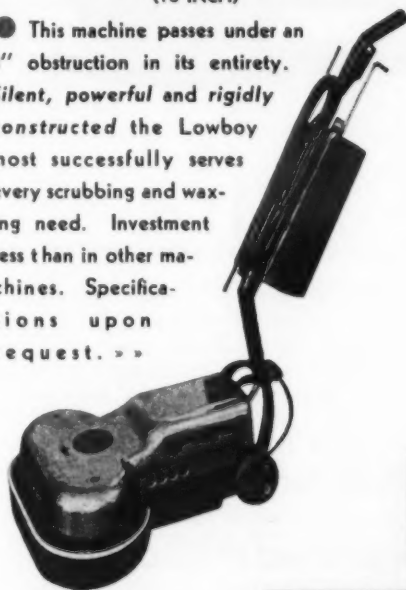
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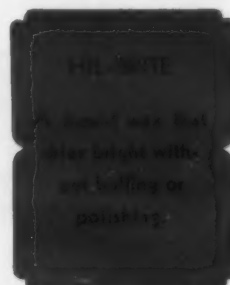
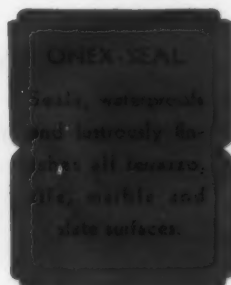
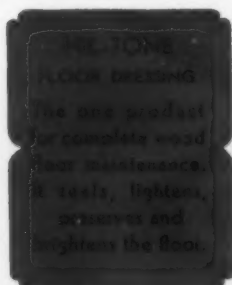
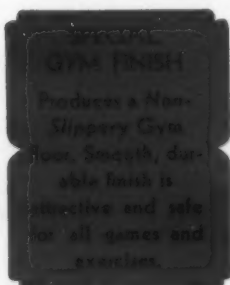


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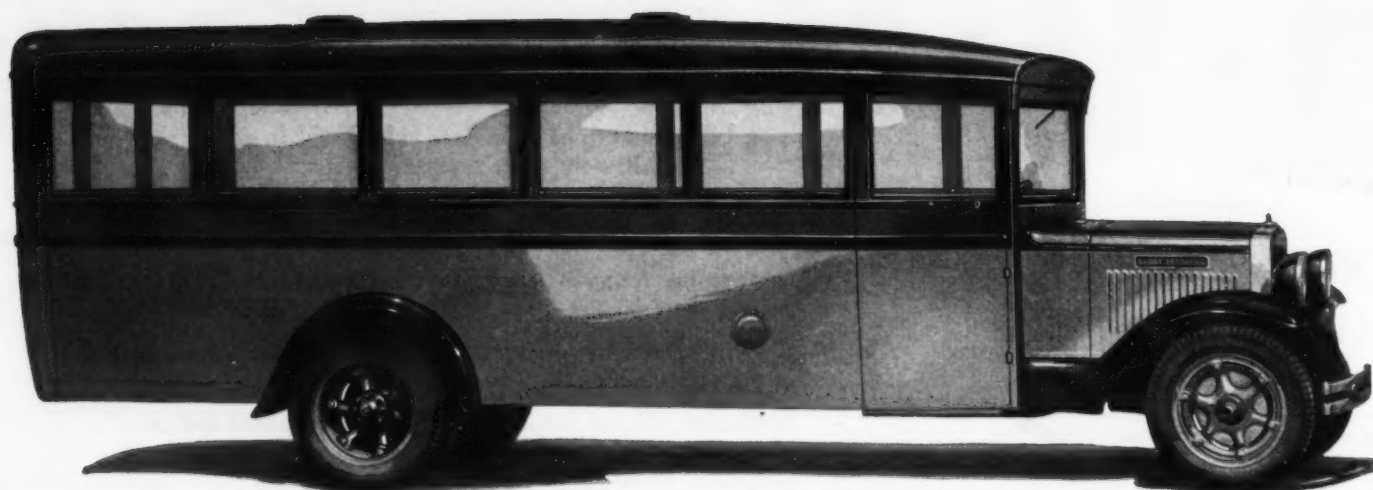
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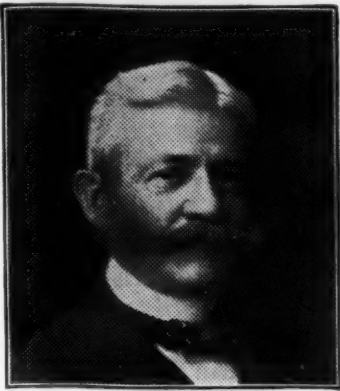
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School Administration in Action

ALL-YEAR SCHOOL NOT A SUCCESS

The all-year school plan carried on for several years at Nashville, Tenn., has been subjected to a careful study by the research division of the George Peabody College for Teachers. The board of education of Nashville added to the three school terms of the year a fourth term of twelve weeks "for those pupils who wish to either make up lost time or gain advanced standing."

The investigators proceeded to analyze the general claim made for the all-year school which has been enumerated as follows:

1. It gives children greater opportunity to choose when they will attend school.
2. It enables children, who deem it advisable to shorten the period of their school education or to advance further than would otherwise be possible before they are compelled to drop out.
3. It lessens materially both school-plant needs and the number of teachers to be employed, hence, materially lessens the cost of the schools.

The study enters into every phase of the plan presenting its findings in illuminating tables and discussions. The conclusions which the investigators arrived at are highly instructive in that they refute quite convincingly the basic claims made for the all-year school.

Pupils Do Not Gain Time

The claim for instance, that the children will do as well during the fourth term as they do in the three preceding terms, thus lessening the total school period, is answered in this way: "Elementary pupils, at least, who have attended the summer quarter in Nashville do not do proportionately as well as the children who do not attend summer school. In fact, the more summer quarters they

attend the less well proportionately do they progress."

The experts admit that the summer school has aided pupils who were behind in their studies, but on the other hand has made for laxness during the regular school term. Pupils will say: "What difference does it make if I fail? I can make it up in the summer." The experts add:

"In short, the data of this study indicate that a summer quarter, as an integral part of an all-year school, can serve to advantage a highly selected group of children only and that its doors cannot justifiably be thrown open to all children who may for one reason or another present themselves for enrollment."

In speaking of teaching efficiency the report says: "Likewise, teachers, compelled by economic necessity to teach year after year the year round, do not seem to take the same interest in their summer work as in that of the regular quarters. It may also be true that teaching in the summer so taxes their energies that their work of the regular quarters is unfavorably affected."

The claim that the all-year school widens educational opportunity is answered as follows: "It should also not be forgotten that this increase in educational opportunities and in pupil instruction days was achieved in part by shortening the regular school year and by lessening the educational opportunities of children during the regular quarter, was achieved in part by robbing Peter and paying Paul."

The Question of Economy

Much has been said about the economies involved in using a school plant for every month in the year. The investigators on this score have the following to say:

"Nor does the data of this study give comfort to the advocates of the all-year school as an economy measure. Whatever the ultimate effect may be on building requirements and teacher needs in Nashville for the regular quarters, the summer quarter as an integral part of the all-year school has thus far in no way affected either the building or teacher requirements for the regular quarters.

SUGGESTIONS IN SCHOOL ECONOMY

Supt. L. W. Feik, of the Sioux City, Iowa, schools, in a recent bulletin says: We, as school people, should endeavor to administer our work in the most economical and efficient manner possible. The following suggestions are made for your consideration in thinking through possible economic measures:

1. Every person engaged in schoolwork should make use of all possible remedial measures to reduce the number of pupil-failures. Such efforts should be continuous throughout the school year. A pupil saved from failure and repetition not only saves the total school cost but saves also the self-respect of the pupil.

2. Principals and teachers should keep a constant check on the lighting system in their buildings. It is possible to save many dollars throughout the system by having teachers, pupils, and janitors watch this particular item.

3. What has been said concerning the use of electricity may be said also concerning the use of water.

4. All employees of the district should endeavor to keep a constant check on all supplies in order that these supplies may be used in proper quantities.

5. All of us should endeavor to see where possible economies may be made. Economy may mean an expenditure at the present time if a saving is possible in the future.

6. Whenever any teacher or janitor has a suggestion for economy, the suggestion should be sent on to this office at once so that it may be evaluated and if found practical put into operation immediately.

♦ The board of education at Huntington, W. Va., has appropriated \$3,500 for shoes and clothing for destitute families.



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Book News and Reviews

WHY TEXTBOOKS ARE CHANGED

The criticism that school textbooks are changed too often is answered by the De Soto, Mo., Press, in the following language:

"We feel safe in saying that some of the critics are daily discarding some of their personal things that are still meeting their necessary needs and buying new ones merely because styles have changed only slightly. For example, take a car that is five years old and is still functioning properly. The average American would not think of continuing to drive it. Take another example of a last year's hat. It may be in perfect condition and even of better material than the new one you would buy, but few people would think of wearing it, even for another year. I could give many other striking illustrations, but my readers will be able to make them for themselves.

"The above illustrations are about more or less trivial matters, but textbooks are entirely different. Textbooks are supposed to contain the subject matter that is being used outside of school at the present time and that subject matter is supposed to be presented in a manner that has proved to be the most successful in our experimental schools such as the teachers' colleges and universities.

"Business men know that unless they change their plans to meet new conditions their stores or factories, or whatever business they may be engaged in, will be a failure. School critics tell us that, even now, a large part of the information we teach in school is out of date before the students whom we teach are able to apply it. If this be true, what would a high-school education be worth if the student can make no application of what he has learned?"

NEW BOOKS

George Washington

By Thora Thorsmark. Cloth, 293 pages. Published by Scott, Foresman and Company, Chicago, Ill.

To add a new book on the life and labors of the immortal George Washington to the many now in ex-

istence would seem a superfluous task. But not so. A career so rich in service to a nation, so colorful and brilliant, affords new approaches and new estimates.

The year 1932, the bicentennial year of George Washington's birth, calls for literature on the great founder of the Republic. The new volume before us lends itself for popular reading. It is compact and yet complete, dealing as it does with George Washington as a man, as a soldier, and as a statesman. In fact, the author has managed to construct a unified narrative that permits a conception of the whole man and his entire career.

The book makes interesting reading, more specially in the light of the problems which afflict the country at this time. What a fund of wisdom is embodied in the statesmanship of the first president of the United States! The counsels he offered, the views he expressed, the departures he suggested, continue to possess a guiding influence.

Among the things which Washington deemed vital to the stability and perpetuity was a sacred regard for public justice. He also had in mind a friendly attitude between state and state, community and community, in order that prosperity might be attained and maintained. "No nobler figure ever stood in the forefront of a nation's life," said an English historian.

The book makes its appearance at a most opportune time and provides the information about the nation's founder that every American citizen should possess.

Burke's Speech on Conciliation

Edited by H. D. F. Widger. Cloth, 150 pages. D. C. Heath & Company, Boston, Mass.

The editor's introduction strongly emphasizes the historical reasons for Burke's effort. The literary appraisal, projects, and notes are sufficiently brief to destroy the enjoyment of the speech as such.

New Path to Reading

Book Four. By Anna D. Cordts. Cloth, 384 pages. Price, 80 cents. Ginn & Company, Boston, Mass.

The author of this series holds that children should complete the mastery of the technique of reading in the third year of school, and beginning with the fourth year, should be led to read as a stimulating, satisfying experience. She would make reading in the fourth, fifth, and sixth grades so attractive that the habit of getting ideas, inspiration, and joy out of the printed page will continue for life.

The present book shifts the emphasis of the work from the mechanics of reading to the enjoyment of content and literary form. The selections are taken from recent literature treating of pioneer and Indian life, child activities, true animal experiences, and some inspirational biographical stories. In form and content, the material has been kept at a fairly low level for the abilities of fourth-grade pupils, so that accuracy of understanding and mastery of the vocabulary can be insisted upon. The devices for testing pupils upon these points have the merit of informality and child interest.

In the hands of even an average teacher, the book should most readily achieve its purpose.

Projects in Business Science

By Lloyd L. Jones and James L. Holtzclaw. Published by the Gregg Publishing Co., New York, Chicago, and Boston.

A series of projects in business science which will be found helpful for teachers in commercial classes. The projects are inclusive and practical and comprise personal financial forms, home budgets and financial forms, financial forms for the small business office, merchandise forms, assets and liabilities forms, double-entry system of records, bookkeeping and accounting forms.

Our Pacific Possessions

By J. Earle Thompson. Cloth, 278 pages. Price, 90 cents. Published by Charles Scribner's Sons, New York.

A schoolmasterly and quite conventional account of a trip to Alaska, Hawaii, and the Philippines. At least one of the pictures is not suited to children. Liberal editing might make an attractive geographic reader of the valuable mass of information which the author has collected.

Elementary Art

For Grades I and II, Grades III and IV, Grades V and VI, and Grades VII and VIII. By R. W. Hedley and G. F. Manning. Published by the Institute of Applied Art, Limited, Edmonton, Alberta, Canada.

This series of four books outlines a complete course in art instruction for elementary grades. The drawings are intended to encourage teachers to plan and carry through problems in a manner which will provide the pupils with a maximum of training in self-expression. The plates of drawings, with the notes, show how to use the tools of art expression, suggest methods of developing the imaginative faculty, and emphasize the need of exactness and care in construction. The work has been graded according to the ages of the pupils and the entire material should prove helpful to the teacher of art.

(Continued on Page 68)



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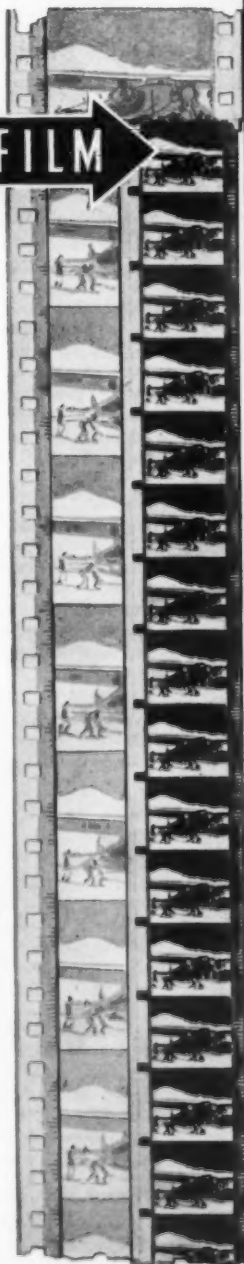
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THE STANFORD SPELLER is a practical combination of the pupil's textbook, workbook, and spelling pad. The use of THE STANFORD SPELLER in the hands of the pupils:

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(Continued from Page 66)

The Human Head

By Frances M. Beem. Loose-leaf folio, 16 plates. Price, \$1.25. Published by The Bruce Publishing Company, Milwaukee, Wis.

There is no object in the field of art which receives more attention than the human face. This is probably due to the fact that nothing is more obvious and more immediately before us than the countenance of man. There are many objects which readily lend themselves to picture reproduction, but when it comes to the portraiture of a human face with its various expressions the power of art must be employed. Men may draw a map of a human head, but to secure a likeness is quite another thing.

The series of 16 plates here presented deal in progressive order with the anatomy of the head, the bone and muscle construction and the integral parts thereof. They lead the student from the rudimentary stages to the finished portrait. The text which accompanies the plates deals with construction and design.

Two Times Two Is Four

Adapted from the Swedish of Zacharias Topelius by Vera C. Himes. Cloth, 64 pages, illustrated. Price, \$1.50. Thomas Y. Crowell Co., New York City.

This is a book for little children. The text is drawn in large lettering and the illustrations are presented in color. They deal with the children's favorites, rabbits and squirrels, dogs and cats. While the text bears in mind the fact that two times two makes four, it emphasizes in the reasoning of the child the elements of cause and effect.

The Nature and Treatment of Stammering

By E. J. Boome and M. A. Richardson. Cloth, 143 pages. Price, \$1.50. E. P. Dutton & Company, New York.

The authors of this work, who are respectively a medical officer and a teacher of stammerers, hold that most cases are due to psychic inhibitions set up in early childhood. But few cases, comparatively, are due to a defective physical mechanism of speech. In support of their theories, they present a series of typical accounts of the difficulties of stammerers, written by the patients themselves, and chosen because of their clear explanation of the mental attitude of each sufferer. The treatment suggested involves a careful case study, the removal of physical impediments, individual treatment by suggestion, relaxation, and practice; improvement and help through the home environment; sympathetic help in the special class at school; reasonable use of discipline, incentives, and self-control. The book is marked by a common-sense avoidance of extremes

that is delightful. Educators in charge of special classes will find the discussion and recommendations both an inspiration and a guide.

General Mechanical Drawing for Beginners

By R. C. Woellner and E. C. Wittick. Cloth, 126 pages. Price, \$1.12. Ginn & Company, Boston, Mass.

This book provides a brief survey course for boys at the junior-high-school level, and assumes that the purpose of the course shall be largely exploratory and informational in harmony with the general objectives of the junior high school. The work is organized on the familiar unit or job basis, in which a basic statement of "principles" and techniques is followed by a problem to be drawn, suggestions for procedure, questions, and references. Unit C, in which the student is introduced to working drawings, dismisses the important topic of projection with one excellent illustration and four brief explanatory sentences, and carries along the student rather more rapidly than the average teacher will care for. It would seem that dimensioning, the alphabet of lines, cross sections, the use of the triangle, title-space dimensions, etc., might very well be reserved for one or two separate units and separate problems. Similar crowding up occurs in the unit on architectural drawing.

In the hands of an experienced teacher who has a good collection of plates developed from local experience and local needs, the book should prove an exceptionally useful basic text.

Check List of Materials for Public School Building Specifications

By Lee Byrne. Cloth, 203 pages. Price, \$2.25. Teachers College, Columbia University, New York City.

This check list of materials has been developed from eighteen sets of specifications for large school buildings erected in recent years. Thirteen additional sets were used for reference and comparison, and in all more than 75,000 actual items were studied and listed. The book does not in any way check the plan, arrangement, or construction of a building, but outlines only the general conditions, the materials, and the operations involved in the actual construction. The list will be of chief value in checking the proposed operations to be employed in placing various types of materials in various parts of new school buildings. The work is to be commended for its thoroughness and completeness. The labor involved must have been enormous.

The Gingerbread Man

By S. N. Coleman. 72 pages. Price, \$2.50. John Day Company, New York, N. Y. Songs for kindergarten use, based on folk and fairy tales.

Drills in English

By G. B. Works and Clarence Stratton. Paper. Doubleday, Doran & Co., Garden City, N. Y.

The one hundred drills cover the principles of composition and are presented in the form of tests involving the correction of faulty sentences, judgments to be passed on the correctness of sentences and phrases, the recognition of parts of speech, etc. A series of 22 achievement tests for diagnostic purposes accompanies the main text.

Hawthorne's House of the Seven Gables

Edited by W. H. Green. 412 pages. D. C. Heath & Company, Boston, Mass.

The historical background for the story is carefully developed in the introduction. Questions and problems are added.

Stories About George Washington. By Frances J. Olcott. Paper, 60 pages. Price, 28 cents. Published by Houghton Mifflin Company, Boston, Mass. The booklet is a reprint of stories about Washington, together with a selection of famous poems. The material was prepared for use in connection with the observance of the Washington bicentennial and is appropriate for reading in the intermediate grades.

Washington the Man. Cloth, 94 pages. Price, 44 cents. Published by Houghton Mifflin Company, Boston, Mass. This book is a reprint of Henry Cabot Lodge's *Biography of Washington* and takes up that part concerning Washington as a famous man. The book is outstanding because of its historical accuracy and because it offers excellent reading material for American youth in connection with the observance of the Washington bicentennial.

George Washington Pageants and Plays. Prepared for the George Washington Bicentennial Commission. Issued by the Government Printing Office, Washington, D. C. A list of suggestive pageants and plays depicting the life of George Washington and his time, for the nation-wide celebration of the two hundredth anniversary of his birth. The material is varied in scope and content, contains authentic data, and illustrates various events in the life of Washington and his time. Suggestions are also given for costuming Washington pageants and plays, together with information concerning various stage properties.

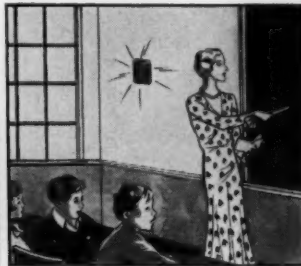
The Genesis and Constancy of Ascendancy and Submission as Personality Traits. By Sister Mary Aquinas McLaughlin. University of Iowa Studies in Education, New Series No. 216. Published by the University of Iowa, Iowa City, Iowa.



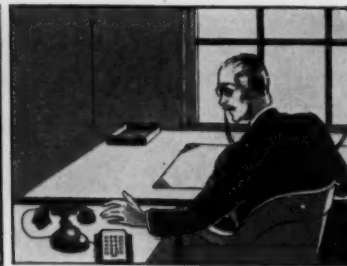
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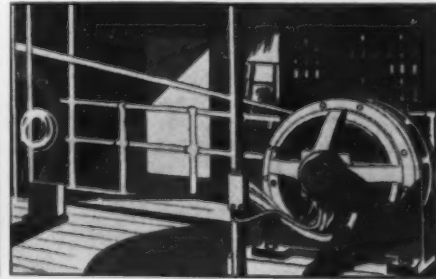
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PUBLICATIONS

The Measurement of General Spelling Ability Involving Controlled Comparisons Between Techniques. By Walter W. Cook. Paper, 109 pages. Bulletin No. 6, February, 1932, issued by the University of Iowa, Iowa City. The present study was limited to three of the major problems confronting a builder of tests, namely, (1) the selection of test items, (2) the selection of a test technique for presenting the items, and (3) a method of determining the optimum number of items to be included in a test. The investigation was divided into three distinct experiments. The first dealt with the selection of test words with regard to difficulty and discriminating power, and the establishment of optimum administration time for spelling tests. The second dealt with the establishment of the optimum administration time for and the evaluation of six self-administering test techniques when spelling ability is defined in terms of the number of correct spellings of a limited group of frequently used words. The third experiment dealt with the evaluation of the six self-administering test techniques in terms of the percentage of correct spellings in first draft schoolroom writing.

The results indicated that the formal study of spelling is effective in increasing spelling ability. Whether an 8.12 per cent increase in ability to spell words justifies the time and effort in acquiring it, depends upon the relative importance of ability to spell among the component elements that go to make a cultured citizen, and the relative value of other elements that might be developed if the subject were omitted from the school curriculum. It was found that the eighth-grade girls spelled the 200 words used in the experiment with an accuracy of 8.4 per cent higher than the boys. The boys spelled better than girls such words as criminal, exhaust, cornice, bicycle, and guitar. The girls excelled the boys in such words as complexion, clumsy, fickle, elegance, negligee, ruffle, and taffeta. The implication was that pupils tend to learn to spell the words they use most frequently and which represent their life interests. It was suggested that words of high frequency be omitted from the course of study, to give more time for words which give difficulty, or words which are less frequently included in the elementary spelling lists.

Lists of Essential Apparatus for Use in High-School Sciences. By T. C. Holy and D. H. Sutton. Paper, 32 pages. Price, 75 cents. Bulletin No. 12, 1931, issued by the Bureau of Educational Research, Ohio State University, Columbus, Ohio. The study was undertaken for the purpose of ascertaining the apparatus considered most essential in the teaching of the sciences in high schools, together with the approximate costs. It covered a total of 35 states and was begun after the

need for such a study was made apparent by an inventory of science apparatus in more than 600 school districts. The booklet lists equipment for chemistry and physics, biology, and general science, and offers a check list which will be found useful by teachers and supervisors of these subjects.

Teacher Demand and Supply. Bulletin No. 5, November, 1931. Issued by the research division of the National Education Association, Washington, D. C. A nation-wide study of the problems of teacher supply and demand, taking up problems in demand and supply, studies of teacher demand and supply, status of teacher demand and supply, progress of research on teacher-supply-and-demand problems, procedures in the study and management of teacher personnel, and a suggestive state problem.

The Reliability of Quarterly Marks in the Seventh Grade of Junior High School. By Carey Taylor. Bulletin No. 17, Johns Hopkins University Studies in Education, Johns Hopkins Press, Baltimore, Md. Are teachers' marks as unreliable as we have been led to believe? To what extent can a teacher control the reliability of such marks? Such questions as these are answered in the study of quarterly marks of junior-high-school pupils. The pamphlet takes up the value of the Otis and Stanford achievement tests, the reliability of teachers' marks as a criterion of success, and other phases of the subject involving problem, method, and material.

Rules and Regulations of the Board of Education of Stamford, Conn. A complete set of rules governing the work of the board of education, the superintendent of schools, supervisors, teachers, pupils, janitors, and medical inspectors in the schools.

Emergency Nutrition. By H. C. Sherman. Issued by the Child Health Association, New York City. The food problem of the present unemployment emergency presents itself in the form of the question, "What best to do with an inadequate amount of money?" The pamphlet tells how to select the bare essentials, how to retrench in food materials, and how to select the cheaper or cheapest forms of articles within each of three essential food groups. The dietary must be built around bread and milk, supplemented by a little inexpensive fruit or vegetable.

Food at Low Cost. By Lucy H. Gillett. American Child Health Association, New York City. Suggestive food groups for growing children, comprising milk, bread and cereals, vegetables, and fruits.

Community School Plans. Prepared by S. L. Smith. Issued by the Julius Rosenwald Foundation, Nashville, Tenn. This publication is a carefully revised

edition of the school plans of the Rosenwald Fund, which are intended to meet growing demands and trends in education. Each plan is arranged to furnish flexibility in the size of rooms to meet special demands and to permit of changes without very much additional cost. The Fund offers many helpful suggestions and is equipped to furnish plans, without cost, to the southern states for both white and colored schools. The booklet includes a number of standard room arrangements for schools above the three-teacher type.

Motion Pictures of the U. S. Department of Agriculture for 1931. Bulletin No. 111, June, 1931. Issued by the Government Printing Office, Washington, D. C. A list of educational films of the Department of Agriculture and how they may be obtained. The list is intended to acquaint the public with the significance of important activities, by making common property of the results of scientific investigations in agriculture, forestry, road building, rural engineering, and kindred pursuits.

Salary Schedules for Elementary-School Principals, 1930-31. Circular No. 10, October, 1931, issued by the research division of the National Education Association, Washington, D. C. This report gives the results of a study of salary schedules for principals in 88 cities over 100,000 in population. It outlines the bases for determining the salaries of elementary-school principals and indicates the minimum and maximum salaries, the annual increments, and the variations which obtain for size of building and professional training in each of the 88 cities.

Salaries of Teachers in the Public Day Schools of Massachusetts for the School Year 1931. Bulletin No. 9, 1931, of the state education department, Boston, Mass. This bulletin presents in compact form, information relating to teachers' salaries that is of most significance to school officials. It includes each town and city, with the maximum salaries paid in administrative and teaching positions, and the average salaries paid to women teachers in the elementary and junior high schools, and to men and women teachers in the high schools. Some comparative information is also given on the average salaries for the state and the several groups of cities and towns during the years 1920, 1921, 1926, and 1931.

Financial Data for Ohio Cities and Exempted Villages as of September, 1930. A complete statement in statistical form of the valuation, bonded debt, tax rate, recent bond issues, etc., for Ohio schools. Compiled by Dr. T. C. Holy and Dr. D. H. Sutton, Ohio State University, Columbus, Ohio.

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THIS Heywood-Wakefield combination desk and chair unit is designed for economical, flexible classroom seating. It can be easily moved about for sweeping, cleaning, or class rearrangement. The top is made of solid wood—a feature that prevents marring and chipping which is so prevalent in veneer. A roomy storage drawer that fits under the seat may be secured for this combination piece. Inkwells for the desk top are also available. This Movable Chair Desk meets the most rigid requirements of any up-to-date classroom. It is shaped to give freedom, comfort, and correct sitting posture to any student. No great expense is required to install this compact unit. Your nearest Heywood-Wakefield Sales Office will be pleased to give you detailed information concerning this Movable Chair Desk or advise you on any school seating problem you may have.

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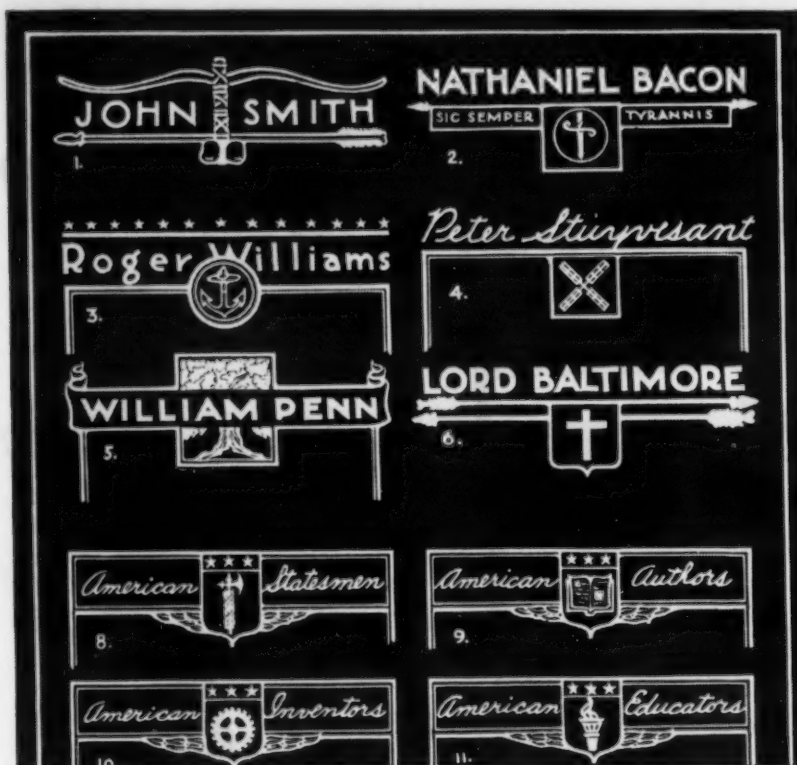
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HHEYWOOD-WAKEFIELD cordially invites you to inspect their exhibit of school furniture at the N.E.A. meeting of the Department of Superintendence at Washington, D. C., February 20 to 25, inclusive. H-W booth numbers are 242, 243, 248, and 249 in the Washington Auditorium.

HEYWOOD-WAKEFIELD



Chalk Talks Make Easier History Teaching

To quote the words of a noted educator—"Have the chalk at the tips of your fingers as well as the words at the tip of your tongue". And in history teaching this fact is never more clearly demonstrated.

In tracing an American pioneer's journey, in following the growth of our commonwealth or in referring to Indian implements, a hastily drawn blackboard sketch serves to imprint the subject much more clearly on the pupil's mind. In the suggestions illustrated another type of blackboard drawing is recommended. Here are decorative headings which furnish an interesting starting point for the lesson. Tie up symbols relating to the person in a decorative manner.

For instance in Fig. 1 the tomahawk and arrow—objects closely connected with Capt. John Smith's life among the Indians. Figs. 3 and 4 show portions of the coats of arms of Rhode Island and New York City with which these men are intimately linked. The children should be taught the significance of the various symbols used. A word in conclusion—most drawings of this type look more effective when lettering is employed instead of writing—and if colored chalks as well as the usual white chalk is used, unusually attractive headings result.

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School Finance and Taxation

MANSFIELD'S SCHOOL FINANCES EXCELLENT

The board of education and the executive officers of the schools at Mansfield, Ohio, operated the school system so carefully and economically during the year 1931, that the board of education has been enabled to assure the community that the schools will complete the usual program of nine months. According to a report prepared by Dr. John H. Bristor, clerk of the board, the operating expenses during the year 1931 were reduced by \$54,280 without impairing the efficiency of any essential school service. The program of economy was led on the educational side by Supt. C. A. Waltz.

The main economy resulted from a reduction of \$30,280 in operating expenses and \$23,818 in salaries. At the beginning of the year 1932 the board of education had paid all current bills and had turned over to the Teachers' Retirement Fund its share of the annual payment. The *Mansfield News*, in commenting on the achievement of the school authorities, says:

"A report . . . at the organization meeting of the city board of education shows that the Mansfield school district finances are in A-1 condition. . . . This will not be true of many Ohio cities. In some cases school officials are confronted with curtailing the school program to eight months.

"The saving of \$54,139.06 in itself, in view of decreased budgets as a result of diminishing revenues during the past several years, is an extraordinary feat in itself. Yet it is not entirely indicative of the caliber of work which is being done by the board of education.

"It shows this body of men realized the problems and dangers confronting the Mansfield school system from the viewpoint of finance, and with much painstaking effort, worked out a program which has resulted in saving the city a goodly sum of money as well as making it possible to carry on the school

program without curtailment of the school year or activities."

EVANSTON SCHOOLS CONDUCT SALE OF TAX WARRANTS

The finance committee of the school district of Evanston, Ill., on January 4, issued an appeal to the citizens and business houses to buy 1931 tax-anticipation warrants of the schools. Purchasers were encouraged to buy the warrants on the basis that they will insure the maintenance of the schools and that they will constitute a good investment at a fair rate of interest. The warrants were offered in denominations of \$50, \$100, \$500, and \$1,000 and bear 5 per cent interest.

FINANCE AND TAXATION

♦ Bellingham, Wash. The school board recently voted a special levy of 3 mills for general school expenses. The present salary schedule has been retained, with slight reductions.

♦ Boston, Mass. A reduction of \$1,000,000 in school costs, and the adoption of a building program for the financing of bond issues for new construction, have been ordered by the mayor as the contribution of the school board to the retrenchment program. The order which has been accepted by the school board and the schoolhouse commissioner, will make possible a reduction of \$4,250,000 in the 1932 appropriation for school purposes. The school board has taken steps toward the preparation of a budget which will involve a saving of \$1,000,000 in the budget.

♦ Akron, Ohio. The board of education has voted to cut \$1,065,000 from its operating fund. Salary cuts, reduced personnel, and elimination of various school services have been ordered to help meet the shortage caused by a reduced budget.

♦ Danville, Va. The school board is facing a possible reduction in salaries and a general retrenchment in funds, as a result of the depression which has affected school funds.

♦ Watertown, Wis. Under a program of rigid economy during the depression, the students of the junior and senior high schools are financing the support of extracurricular school activities through the purchase of stamps at 10 cents each week. Under the plan, 600 students have taken advantage of the opportunity to purchase the stamps. Students who

purchase the stamps are given tickets which admit them to athletic contests, assembly programs, class plays, and debates. They receive, in addition, the regular issues of the school paper and annual.

Under the plan, the students expend \$3.70 during the year, which allows them a share in all the school activities which would otherwise cost them \$7 a person. The various activities have received approximately the same financial support as under the former single-admission plan and they have obtained the support of fully twice as many persons as formerly. It has created a good deal of enthusiasm and has had a beneficial effect upon the extra-curricular program.

♦ Portsmouth, Va. The city council has approved the full amount of the school budget for the year 1932, which means that there will be no salary reductions. The salary schedule has been retained for the present year, but no additional teachers have been appointed.

♦ Park City, Utah. Under a consistent and conservative policy of budget planning and saving each year, the Park City school board has maintained a margin in operating appropriations during a 10-year period amounting to approximately 70 per cent of the year's operating costs.

A reserve trust fund has been accumulated for use during a grave emergency. The town is located in a lead- and silver-mining center. For the past two years, due to falling prices in metals, the net proceeds of mines has been reduced to the vanishing point and assessed valuations have shrunk to one sixth of the normal amount. In the face of the present condition, the reserve fund has been a means of material help in keeping the schools in operation the full length of time, and has prevented the necessity of an abnormally high levy in taxes. During the year, this reserve fund may be drawn upon for a substantial part of the operating revenue.

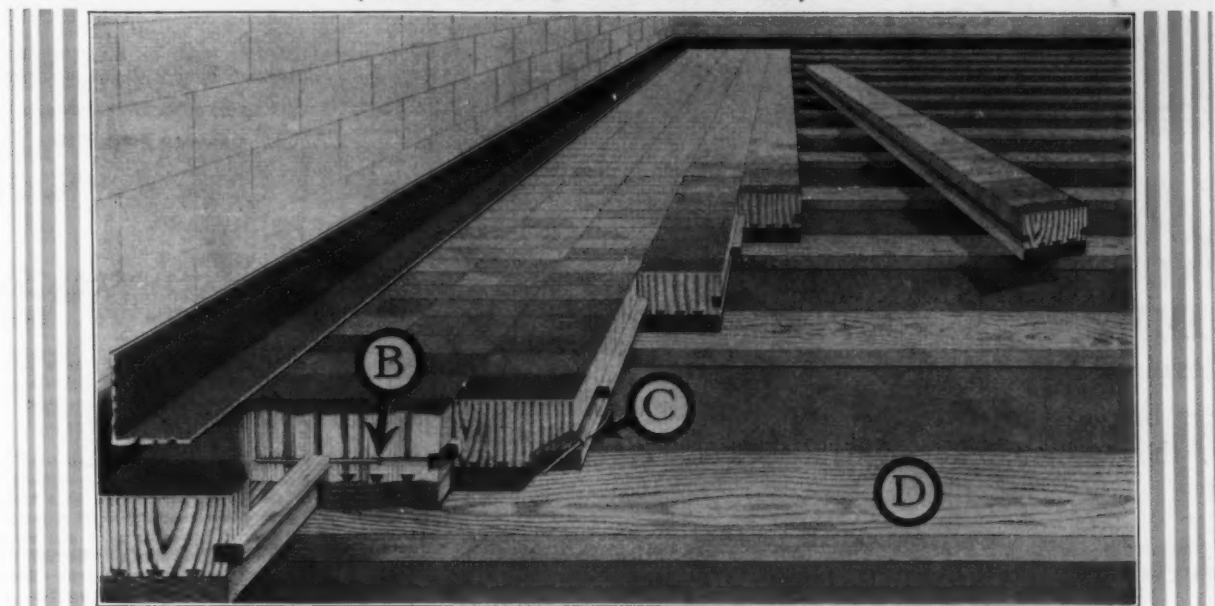
The school district enjoys the unique distinction of not being obliged to borrow money on tax-anticipation warrants. This is noteworthy, in view of the fact that few school boards in the country are operated in such a manner that the depositories pay interest on accounts which may be set up in a budget from year to year as anticipated revenue.

(Concluded on Page 75)

"Our BLOX-ON-END Gym Floor has eliminated Shin Splints and serious Heel Bruises"

J. W. Merriman, Director of Physical Education,
Kingswood School, West Hartford, Conn.

(DUE TO ITS RESILIENCE)



B Blox-on-end sections broken to illustrate Lateral Nailing. Nails come positioned in counter-sunk bores ready for driving.

C Illustrates toe-nailing method.

D Floor strips laid loose over subfloor to give finished floor a cushioning that eliminates shin splints and heel bruises.

Visit our Booth No. 62
at N. E. A. Convention

Medical men and trainers say that shin splints and serious heel bruises so common to basketball players are caused by rigid, unyielding gymnasium floors.

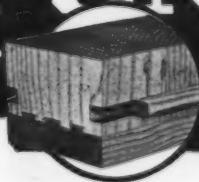
You can safeguard your athletes against such injuries if you will insist that your gym be floored with Genuine BLOX-ON-END. This flooring does not come into direct contact with the subfloor. The built-up lengths of BLOX-ON-END are laid over 1x4 in. strips placed 12 or 16 in. on centers with voids between. The playing surface is fast, yet it possesses a springiness and a cushion-like effect that is not obtainable in any other type of gymnasium flooring.

BLOX-ON-END Flooring is 2 1/2 in. thick. As it presents an end-grain surface, this flooring is non-slip, splinter-proof and long-lived. Widely used in leading schools and universities. Write for Free Descriptive Booklet.

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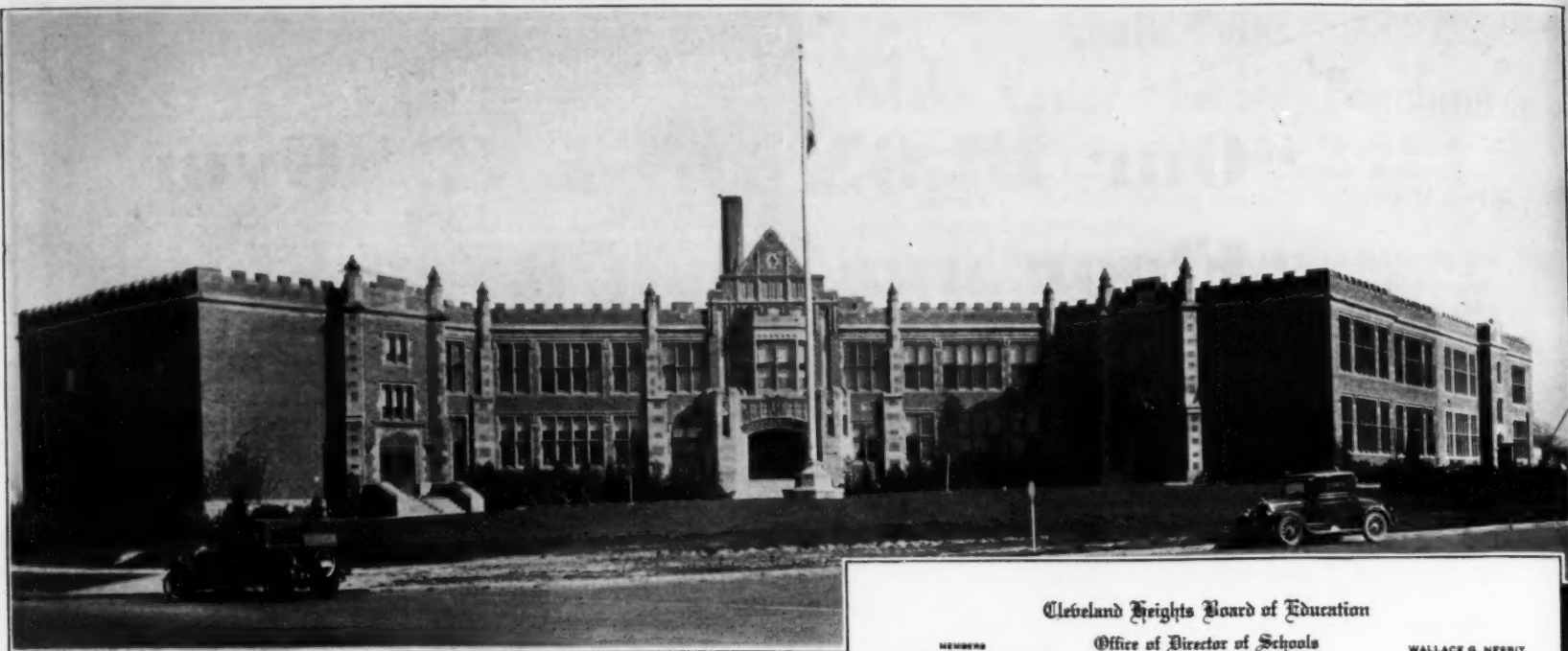
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Stays Smooth*

Bloxonend is the genuine strip block flooring. It is furnished in 8 ft. lengths with the end-grain blocks securely dovetailed to baseboards.



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Cleveland Heights, Ohio

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March 24, 1931.

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Gentlemen:

The floors in our schools have caused much favorable comment by school authorities and visitors in general. You will undoubtedly be interested in this, as all of these floors are treated with your products.

I am naturally quite pleased with the results obtained, because floors and floor treatment have been my hobby for over seven years. During this time I have had products of various manufacturers put through all kinds of tests. As a result of my experience and these tests, your products have been used as standard on all of our wood and linoleum floors for the past two years. The floors treated with Vesco-Seal and Vesco-Lite or Pyra-Seal and Pyra-Cote have proven very satisfactory. Although either material produces a good looking, easily maintained floor, Pyra-Seal and Pyra-Cote have been adopted as our standard. This treatment gives the floors a clear wax finish that is non-slippery and easily and cheaply maintained. Scrubbing has been entirely eliminated, and I have found that it is only necessary to machine polish the worn parts once a year. The daily cleaning retains the brilliant natural finish of the wood.

I gladly welcome the inspection of my floors at any time by any one who is interested, and can be referred to for more information regarding the treatment I have followed.

Yours very truly,

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Director of Schools.

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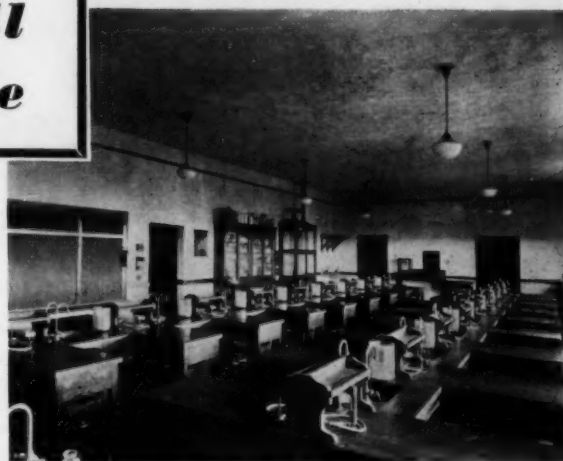
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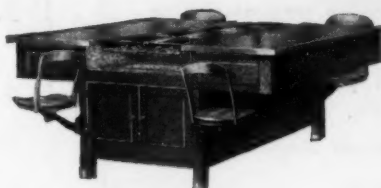
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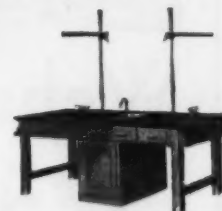
Lincoln Science Desk No. D-503



(Above) Library Table No. 5143



(Left) Drawing Table
No. L-2028



(Right) Combination Chemistry
and Physics Table No. D-591

(Concluded from Page 72)

♦ Dayton, Ohio. The school board has issued \$850,000 in bonds for the operation of the schools until the distribution of the tax money in April. The bonds were issued in amounts of \$303,000 on February 1, \$360,000 on March 1, and \$187,000 on March 31, and will be due and payable April 15.

♦ Canton, Ohio. The board of education has adopted a resolution, calling for an expenditure of \$2,566,213 for the school year 1931-32. This amount is \$458,936 less than the amount appropriated in January, 1931, and reflects the retrenchment measures which were inaugurated last May and which are being steadily carried out.

♦ Minneapolis, Minn. The general fire-inspection bureau recently informed the school board that it is impossible for fire-insurance rates to be reduced, since there have been no definite changes in the school property to warrant a reduction in the existing insurance rates. This means that there will be an elimination of fire insurance and a saving of \$40,000 in the 1932 school budget, since the board voted to drop insurance unless the companies would agree to a rate reduction.

In addition to the saving on fire insurance, the school board has saved \$350,000 by a reduction of two weeks in the school year, and another \$228,000 on miscellaneous items. This makes a total saving of \$618,000, leaving \$3,000 to be pared from the budget allowances.

♦ Boston, Mass. Chairman William A. Reilly has announced that there will be no attack this year on the salary schedule for the 6,000 school employees, irrespective of any retrenchment policy that the school board may put into effect.

♦ Akron, Ohio. The school board has ordered the closing of high-school gymnasiums for practice and games during the present financial emergency. An exception was made in the case of the Central High School. The various school principals have been permitted to use their discretion in finding suitable floors for basketball activities during the emergency.

♦ Portland, Ore. The school board has asked the cooperation of the teaching and custodial staff in helping to solve the financial problems of the

school year. The various teachers' and custodians' organizations were requested to appoint committees to work with the board in finding ways and means of keeping within the budget during the year. The board appointed a committee to make a report on possible reductions in school insurance. It was believed that a survey of school insurance would reveal ways of effecting considerable savings.

♦ Detroit, Mich. The board of education has adopted its budget for the school year 1932-33, which calls for an appropriation of \$24,658,260, or \$12,000 less than that requested last year. The amount of the tax levy is \$15,277,050, which is \$1,126,362 less than that in 1930-31.

♦ State Superintendent Taylor of Nebraska has issued a report, showing that total receipts of schools in the state in 1931 were \$32,501,611. This was \$569,977 less than the receipts in 1930, which were \$33,071,609.

The expenditures of city and village schools in 1931 were \$21,123,717, as compared with \$20,787,410 in 1930.

♦ Cleveland, Ohio. As a means of economy, the school board has eliminated eight draftsmen in the school architect's office. Last year the board cut approximately \$1,000,000 from its operating budget by economies in supplies and teachers' salaries, and this cut is to be extended during 1932. The school board has intimated that it may be necessary to reduce salaries at least 15 per cent during the next year. The present reductions in school expenditures have been taken to offset a shortage in funds due to lowered receipts, tax delinquencies, and decreased tax duplicates.

♦ Lorain, Ohio. The school board has been compelled to accept a budget which is \$11,000 less than last year, due to a radical reduction in the budget ordered by the county budget commission. During the past year the board ordered a number of economy measures intended to reduce the budget expenditures. Among these was an order suspending the usual annual increases in pay.

♦ The Portland, Oregon, board of education has contemplated a 10-per-cent salary cut in the 1932 budget. The Tax Conservation Commission created by statute to review the tax-levying body of the

county has gone over the budget and eliminated two items — swimming pools and substitute teachers. These, it is estimated, will effect a reduction of \$80,000 on a five-million-dollar budget.

♦ Faced with a budget cut of \$1,080,000, the board of education of Rochester, N. Y., received the assurance of 3,000 teachers that they would tender 10 per cent of their time for the school year of 1932. The "work gift" will mean a saving to the board of \$590,000, based on the budget for 1932. The teachers as corollary to their pledge also voluntarily promised to effect all possible reforms in school operation. The pledge was backed up by a provision authorizing legal action to enforce it.

♦ Richmond, Va. Under a new policy, the school board has dispensed with the services of the regular school architect. Plans for new buildings in the future will be obtained by competition among local architects. The board has also discontinued the office of purchasing agent.

♦ The Hamilton, Ohio, board of education has been enjoined by the Ohio Court of Appeals from constructing a junior high school on the basis that the plans presented for approval did not comply with the Ohio building code. The action resulted from a suit against the board, in which it was pointed out that the specifications did not provide proper fire protection for the occupants. It was ordered that the board be asked to proceed with its building program in accordance with the law and the requirements of the school code.

♦ Lorain, Ohio. The bonded indebtedness of the public schools has been reduced to a new low level, as a result of a policy recently adopted by the school board for the elimination of bond issues. During 1931, the schools paid off \$116,725, reducing the debt to \$1,293,500, as compared with \$1,140,225 at the beginning of the year. It is expected that a continuation of the present policy will make it possible to eliminate the last of the bonds by 1948.

♦ Glencoe, Ill. During the early part of January, 200 workers participated in a house-to-house canvass, to raise cash for the operation of the schools and the local government. The goal was set at \$396,700 and local taxpayers were urged to buy the tax warrants in order to provide funds for the support of the three local schools and the village government.

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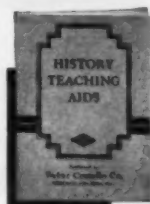
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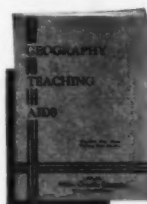


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Chicago Correspondence

THE CHICAGO SCHOOL CRISIS

On December 1, 1931, the Chicago board of education owed in salary and wages the huge sum of \$21,754,490. Since then, \$4,800,000 has been added to the obligations. Since April of last year, the teachers received one month's salary only. In lieu of cash the teachers and employees have accepted \$5,787,610 in scrip.

The \$5,787,610 scrip issued has been cashed by the grocer, butcher, landlord, and other sellers of commodities to the school employees. The Commonwealth Edison Company has reported to Mayor Cermak that it has accepted \$1,200,000 of this scrip and the Peoples Gas Light and Coke Company is carrying about \$1,000,000 of this paper.

But some of the teachers sought and obtained a court decision holding the scrip invalid, although the trustees of the schools have asserted that the school system will make good every dollar issued. However, the court decision stopped the issuance of it. Now the board can neither issue scrip nor obtain the cash with which to pay salaries.

Teachers Manifest Loyalty

The suggestion to close the schools and thus bring home the seriousness of the situation to the taxpayers has not met with approval, either by the board or the teachers. The latter have held to their task as a matter of professional loyalty.

The school board subcommittee on budget has voted to trim the salaries of 1,513 extra-pay teachers, eliminate appropriations for 355 other teachers completely, shut down vacation schools, cut off sick pay and curtail evening schools still further. This, it was estimated, would cut the annual budget about \$3,583,186.

The "extra pay" given teachers is for overtime for principals, assistant principals, and teachers with special duties.

In the meantime, the legislature has taken the initial steps in reaching a solution of the Chicago

tax muddle. Mayor Cermak is satisfied with the passage of the Kelly Bill as a hopeful beginning for a brighter day.

It had been suggested that the Chicago Normal School be closed. This proposal was vigorously opposed, on the claim that unless the institution be kept in operation a teacher shortage may follow.

McAndrew's Foe Disbarred

John J. Gorman, the lawyer and former congressman who acted for the former city administration in "exposing" supposed British propaganda in textbooks used in the Chicago public schools, has been disbarred from the practice of law by order of the Illinois supreme court.

The Chicago Bar Association instituted the proceedings as a result of Gorman's conduct in preferring charges against William McAndrew, when the latter was superintendent of schools.

SELECTION OF SCHOOL SEATING

"In the selection of schoolroom furniture the criteria to be considered are cost, durability, usability in relation to classroom administration, and, last but not least, construction in relation to pupil-health values."

This constituted the opening paragraph of a discussion on school seating, issued by the State Educational Department of New Jersey. The report continues:

"Those who are responsible for the purchase of school furniture are more and more coming to the realization that the most important item to be considered in selecting the seats and desks is the effect upon the health of the children who must use them."

"To produce good sitting posture, furniture must avoid all harmful strains and pressures and make possible a position that will permit normal functioning of the vital organs. Pressures and strains are avoided when the spine maintains its normal curves, which in turn is the case when the body is in proper poise and balance. This is a comfortable position, one that requires minimum effort and produces minimum fatigue over a given period. Furniture that makes good posture difficult or impossible is a contributing cause of body defects."

"The seat back should provide two supports, one

at the lumbar spine (small of the back), and one under the shoulder blades. The space under the lumbar support should be open to permit the body to be moved backward until, with the trunk erect, the spine comes in contact with the lumbar support. It will be noticed that the gluteal (seat) muscles will extend back of the lumbar support. A seat with a solid back prevents this backward movement, making it impossible to obtain correct support at the lumbar spine. The trunk will slump into a 'C' curve, and bad posture will result. With a correct back as described in the foregoing it is possible to sit in a relaxed and comfortable position and still maintain good posture.

"The desk height should be such that when the pupil is sitting well back in his seat, but with the trunk erect, his arms, in the writing position, will rest naturally upon the desk. The distance from the desk edge to the lumbar support should be such as to permit a correct position of the trunk when in writing position. As an aid to vision the slope of the desk top should be from 10 to 15 degrees."

Standards for Seating the Pupil

"Three principal criteria are advanced by experts:

"1. Comfort: This is covered in the foregoing.

"2. Vision: The pupil must be seated at the place in the room from which he can read ordinary script writing on the front blackboard in average light without strain or squint.

"3. Hearing: The pupil with impaired hearing must be seated at or toward the front of the room at the point where he can hear and understand the teacher speaking in an ordinary tone from the front of the room.

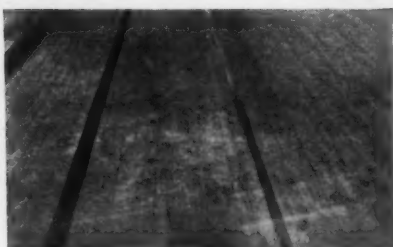
"Vision and hearing are among the most important reasons for movable, adjustable furniture. The significance of these factors in relation to a pupil's scholastic progress and happiness at school is obvious.

"The seating of pupils is clearly a responsibility of the teacher. Cooperation from the physician and nurse is essential, since the results of vision and hearing tests are needed early in the term. The actual moving of furniture and the making of adjustments is a duty of the custodial staff."

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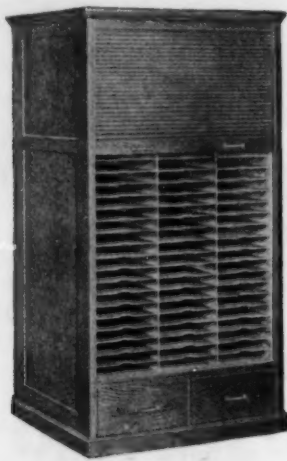
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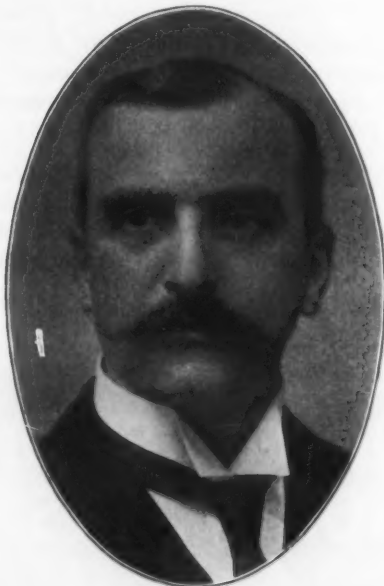


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Personal News of School Officials

DEATH OF HENRY COOK

Henry R. M. Cook, one of those responsible for bringing public accountancy recognition as a profession, and a former auditor for the New York City board of education, died at his home in Bayside, Queens, New York, on January 5. He was 79 years old. Mr. Cook entered the service on the board of education in February, 1888, and later became auditor for the board of education of Greater New York. He retired in February, 1923. He was a founder of the National Association of School-Business Officials and member of the board of examiners of the University of New York.



THE LATE HENRY R. M. COOK
Auditor of the New York Board of Education, 1893-1923

NEWS OF SCHOOL OFFICIALS

♦ Mr. JOHN J. WALSH has been reelected as president of the school board of Waterbury, Conn., for a fifth consecutive term. The new members of the board are Mrs. FLORENCE B. WEBSTER and Mrs. GERTRUDE BOWES.

♦ Mr. J. W. MAIN has been reelected as clerk-treasurer, and Mr. C. A. BOWERS as president of the school board of Shaker Heights, Ohio.

♦ Mr. G. W. SHERMAN has been reelected as president, and Mr. C. R. FOUST, as vice-president of the school board of Akron, Ohio.

♦ Mr. EDWARD M. WILLIAMS has been reelected for a thirteenth time as president of the school board of Cleveland, Ohio. Mr. A. A. BENESCH was reelected as vice-president of the board.

♦ Mr. CHARLES C. SNYDER has been elected as president of the school board of Dayton, Ohio, to succeed Karl K. LORENZ. Mr. H. L. STEPHENS was reelected as vice-president, and Mr. C. J. SCHMIDT continues as clerk-treasurer.

♦ Mr. P. S. BRADFORD has been reelected as president of the school board of Columbus, Ohio. Mr. P. P. BAUGHMAN was reelected as vice-president, and Mr. W. V. DRAKE as secretary.

♦ Mr. J. E. ZENDER, a member of the board of education at New Riegel, Ohio, died at his home on January 1, at the age of 50.

♦ Mr. G. J. PROVO has been reelected as president, Mr. B. B. WICKHAM as vice-president, and Mr. D. C. VAN BUREN as secretary, of the school board at East Cleveland, Ohio.

♦ Mr. DAVID GOODWILLIE has been elected as president of the school board of Toledo, Ohio, to succeed R. C. DUNN.

♦ Dr. C. R. KNOBLE has been reelected as president of the school board of Sandusky, Ohio, for a seventh term. Dr. J. D. PARKER was named vice-president.

♦ Mr. H. W. DIEHL has been reelected as president of the school board of Bellingham, Wash., for the third consecutive term.

♦ The school board of Steubenville, Ohio, has reorganized for the school year, with the election of Mr. HARRY ZINK as president, Mr. B. L. JOYCE as vice-president, and Mr. ALEX SMITH as clerk.

♦ Mr. ARTHUR LEONARD and Mr. F. F. FREY are the new members of the board of education at Mentor, Ohio. The holdover members are Mr. L. B. BOOTH, Dr. A. J. INGERSOLL, and Mr. GEORGE FRENCH.

♦ Mr. JOHN D. CASEY and Mr. SEBASTIAN KORDAS have been elected as new members of the school board at Chicopee, Mass.

♦ Mr. THURMAN BRYAN and Mr. ORIE BAYLESS have been elected as new members of the school board at Falmouth, Ky.

♦ Mr. J. O. SHRACK has been elected a member of the school board at Pratt, Kans., to succeed the late Dr. M. C. JENKINS.

♦ ARTHUR S. SOMERS, a former president of the board of education of New York City, died at his home in Brooklyn on January 6, after an illness of less than a week. He was 65 years old.

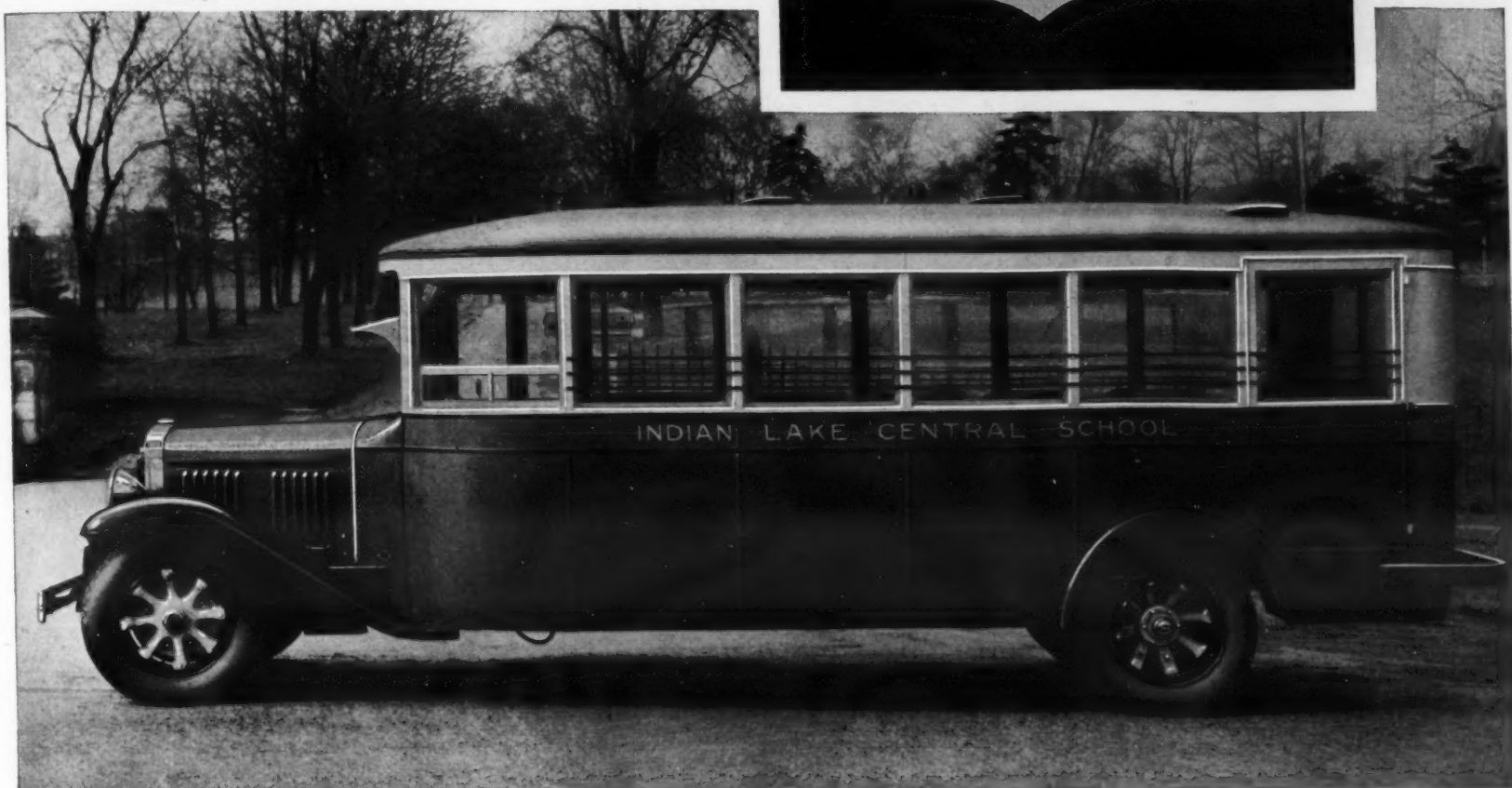
Mr. Somers was a member of the board of education for more than forty years. He was a graduate of Fordham University and held degrees from that institution and from St. John's College. Mr. Somers was a trustee of Long Island University and was widely known as a manufacturer of dyestuffs.



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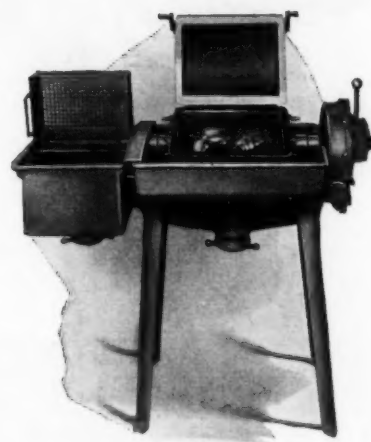
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Teachers and Administration

REMARKABLE TEACHER LOYALTY

The entire corps of teachers and employees of Harbor Special Schools, Ashtabula, Ohio, has voluntarily offered to render one month's services free of charge in order to relieve the financial situation in which the board of education found itself.

The board faced a deficit of \$31,000 and the necessity of closing the schools for the month of December. The *Ashtabula Star-Beacon* which discusses the action under the caption of "A Remarkable Spirit," says: "The teachers and other employees had in mind only the welfare of the children. There was no hurried action. The unanimous proposal to give their services without compensation for a total of a month's time came after thoughtful deliberation. There was no request from officials. The action was initiated by employees and was entirely voluntary."

ARE TEACHERS PEOPLE?

For generations it has been customary to caricature the teacher in pictures and story and to represent her as an eccentric individual — one apart from the typical member of society.

Modern society's recognition of the social and economic importance of education has expressed itself in higher personal and scholastic standards and correspondingly higher rewards for professional services.

Mr. Clyde C. Green, superintendent of schools of New Castle, Pa., writing in the *New Castle School Bulletin*, maintains that the simple fact that no school can rise higher than its teaching corps in the quality of its influence has been recognized by society, and the successful teacher today is one who serves as an ideal for those whom she instructs, rather than a mere dispenser of information. He writes: "In general culture, social graces, and personality, the modern teacher belongs to the best

class of present-day society. In the full sense of the term, she is a normal human being of the first rank.

"Without forgetting her obligations as a public servant, the teacher refuses to be classed as a public slave. She claims and secures from thinking people her rightful place as a citizen. She is interested in and performs her duties in government, community welfare, and the church. In her personal life she has the same hopes and aspirations as other members of society.

"Gradually, but surely, the teachers of America have advanced toward that goal during the past quarter of a century. The breaking down of old-fashioned home life and the growing complexities of modern social and business life have caused society to turn to the school as an important bulwark of civilization, and the teacher is the soul of the school.



JULIUS ROSENWALD
Died Jan. 6, 1932

"As a group, teachers are today committed to high codes of personal and professional ethics and the violation of that code is resented by no group of citizens more than by the teachers themselves. Yes, teachers are people."

♦ A movement has been started in Kentucky for the establishment of a foundation, having for its primary purpose the retirement of teachers and the promotion of education within the state. The organization will be known as the Kentucky Teachers' Retirement and Educational Foundation. The plan is to start a fund by modest contributions from teachers and principals and others interested.

♦ Memphis, Tenn. The school board was facing a deficit in the payroll funds due to a shortage of \$1,000,000 in short-term tax-anticipation warrants.

♦ Knoxville, Tenn. A plan for insuring the employment of additional grade teachers has been sponsored recently by Supt. Harry Clark. In the appointment of teachers, preference is to be given those who are working toward a master's degree.

PASSING OF JULIUS ROSENWALD

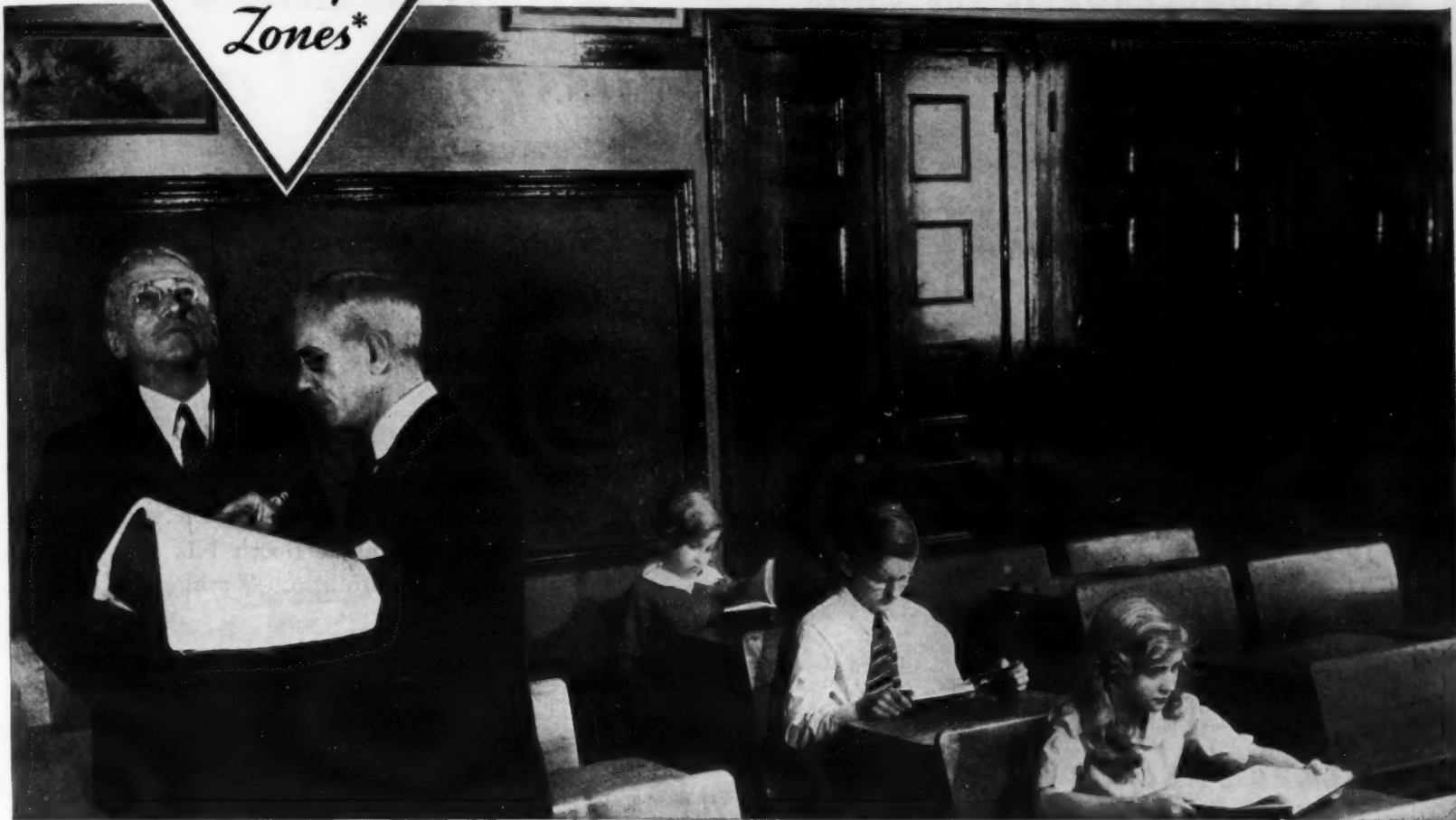
Julius Rosenwald, head of the Chicago mail-order house of Sears, Roebuck & Company, and a benefactor to numerous charities both in Chicago and in the southern states, died at his home in Highland Park on January 5, after a long illness. He would have been 70 in August.

Julius Rosenwald was born in Springfield, Ill., Aug. 12, 1862. In 1895, while he was manufacturing clothing in Chicago, Mr. Rosenwald bought an interest in the business of R. W. Sears, who ran a small mail-order house. He established a new policy in mail-order business and the wisdom of this step was attested by the well-known growth of the house.

Mr. Rosenwald was a philanthropist and gave liberally to charities and the unfortunate poor. His contributions to Jewish relief and to Negro education in the South were enormous. His best-known charity was the Rosenwald Foundation for the improvement of education. The funds derived from the endowment have been used to erect more than 13,000 school buildings for Negroes.

In 1928, Mr. Rosenwald received the Gottheil medal from the National Jewish Collegiate Fraternity for the greatest service to the Jewish race.

TEST FOR *Twilight Zones**



-BRIGHT IN ONE CLASS -DULL IN ANOTHER

A BRIGHT child in one classroom often receives low marks in another. What is the reason? Many reasons may be given, but one—the Twilight Zone*—is seldom if ever blamed.

Here is a simple test you can make for the Twilight Zone. Take a phone book and go to the seat of some child who is bright in other classes, but dull in this. Open the phone book at random. Can you read any name, address, and number rapidly and without effort? If you can't—if you have to squint and draw the book closer to your face—this child is not getting enough light to do his best work. The extra 15% between a good grade of 85 and a poor mark

of 70 is often caused by Twilight Zone lighting.

This simple test will give you a fair idea of lighting conditions in your school, but only a lighting engineer can make an accurate test.

Make an appointment with a Westinghouse Lighting Specialist—and when installing new lighting equipment, specify Sollux luminaires. These luminaires are recognized as outstanding developments in commercial lighting.



Westinghouse Sollux Luminaires have brought many schools out of the Twilight Zone.

**That deceptive half-light between obvious darkness and adequate illumination.*

T 31974

Westinghouse

Westinghouse Lighting Specialists will help you plan an effective lighting system



MAIL THE COUPON

Westinghouse Electric & Mfg. Company
Room 2-N—East Pittsburgh, Pa.

Gentlemen: I am interested in Westinghouse Planned Lighting.

Name

School

Address

City State SBJ 2-32

The lightest 1000 watt sound on film projector ever made and A CHALLENGE to the world in the perfect reproduction of sound!

"I finished installation of West Kentucky Industrial College last week.

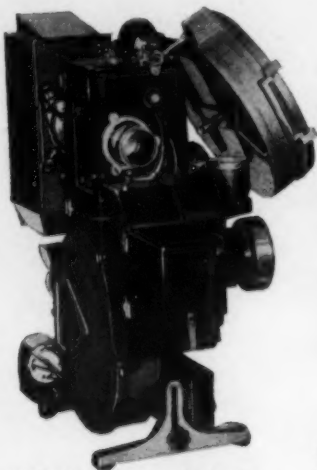
As to the equipment, I certainly want to take my hat off to any man who can design equipment that runs as smoothly and runs as good as this does. It is 100% perfect."

AMERICAN VISUAL SERVICE
C. H. Brandon

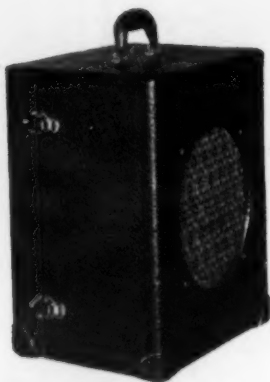
"Heard other portable sound equipments, up to more than double the price, and I must say, truthfully, that results with the HOLMES were so far superior that there is no comparison.

Dialogue clear and distinct, no muffled tones and one very noticeable feature, there was no rushing or roaring of sound reproduction."

ELLIOTT FILM CO.
F. York Elliott

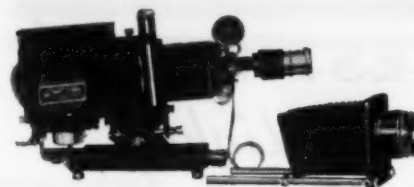


HOLMES Silent Projectors now in use can be equipped for sound on film at small cost.



Complete outfit—which includes everything for reproducing sound-on film talking pictures, ready to run, ALL WEIGHING LESS THAN 90 LBS.

HOLMES PROJECTOR COMPANY
1813 Orchard Street, Chicago, Ill.



Classroom Lanterns

At the N. E. A. Convention, February 20-25th, we will exhibit lanterns for projecting every type of still picture to meet every instructor's projection problem. Be sure to see our Model DC, for projecting glass slides, microscope slides and film slides, and our new Model VAC for projecting four types of material; opaque copy, glass slides, microscope slides and film slides.

You are invited to consult us on your projection problems at Booth No. 246, Washington Auditorium, Washington, D. C.

Visit us at Booth No. 246

Spencer Lens Company
BUFFALO NEW YORK

SUPERVISING AND EVALUATING TEACHING EFFICIENCY

Under the direction of Supt. T. J. Jones, the administrative department of the public schools of West Allis, Wisconsin, has devised a blank for supervising and evaluating teaching efficiency. The blank applies to principals, special teachers, supervisors, and heads of departments of special subjects and is intended to evaluate efficiency in recitations, group management, direction of pupil activity, and character building, through the acquisition of knowledge or the acquiring of skill and power of application. It provides five spaces for the ranking of *superior, above average, average, below average, and poor* teachers, as well as space for general remarks. The blank is reproduced herewith for the benefit of school officials who are interested:

Name of Teacher.....Date.....

WEST ALLIS PUBLIC SCHOOLS
West Allis, Wisconsin

Blanks for Supervising and Evaluating Teaching Efficiency.

Supervising and evaluating teaching efficiency by principals, special teachers, supervisors, or heads of departments of special subjects in the classroom by recitations, group management, directing or guiding in pupil activity, pupil development and character building, through the acquisition of knowledge or the acquiring of skill and power of application and the forming of correct attitudes, habits, and ideals.

THE CLASSROOM AND THE TEACHER Remarks

1. TEACHING TECHNIQUE

Assignment
Participation
Aim of Activities
Method, skill in using
Motivation
Standard or Ideals
Results
Preparation

2. PERSONAL TRAITS

Scholarship
Manner
Voice
Dress
Sympathy
Coöperation
Openmindedness
Judgment
Tact
Resourcefulness
Sense of Justice
Leadership
Enthusiasm

3. MANAGEMENT

Order-pupil Conduct
Posture
Housekeeping
Systematic
Executive Ability

4. PHYSICAL OR MATERIAL FACILITIES

Properly supplied
Use of available supplies and equipment
Care of available supplies and equipment

5. STUDENT RESPONSE

Interest
Application
Development
Participation

6. GROUP RESPONSE

Interest
Application
Attitude
Progress

7. GENERAL TEACHING EFFICIENCY

OBJECT—1. Better Teaching; 2. Growth in Service.

1. Did you make suggestions to the teacher after your visit?
If so, what?
2. Did you visit this teacher before?
How many times?
Did you make suggestions?
3. Results of former suggestions?

QUALIFICATIONS NECESSARY FOR PERSON REPORTING

1. Reasonable mastery or knowledge of subject.
2. Knows good teaching.
3. Understands the learning process.

4. Good judgment or common sense.
5. Freedom from prejudice.

GOLDEN RULE: All things whatsoever ye would that men should do unto you, do ye even so unto them.
"Supervision is the cooperative effort of a teacher and a professionally trained helper to improve instruction."

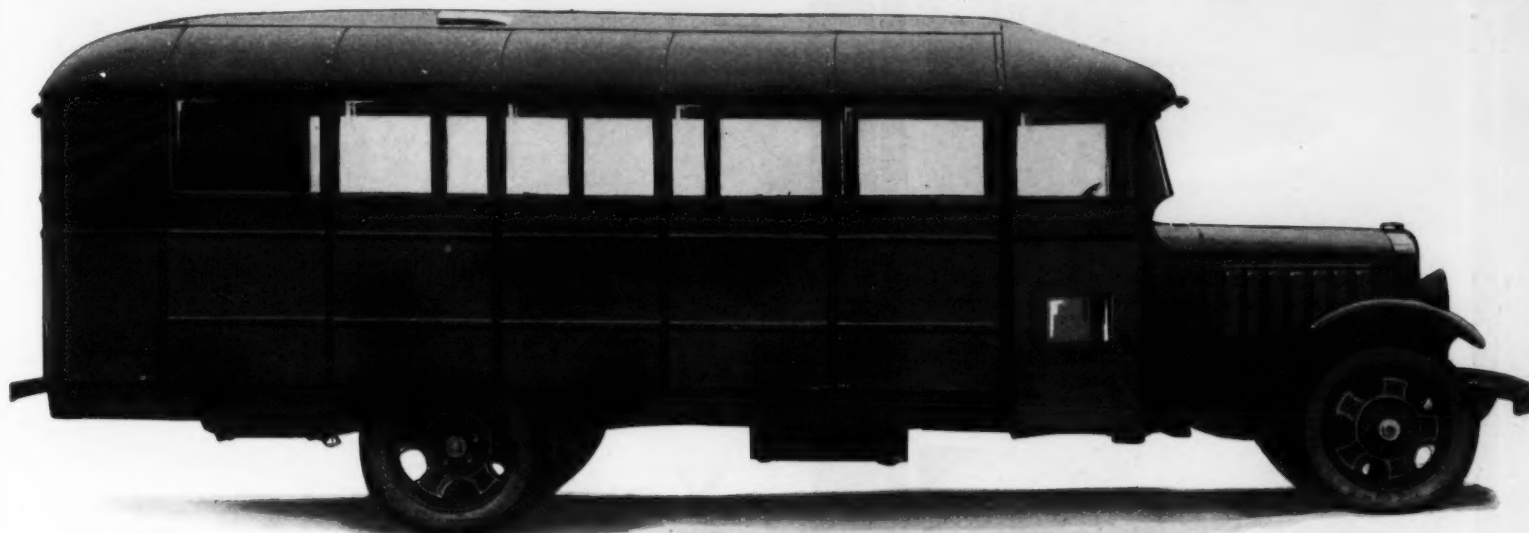
General Remarks:

Person Reporting.....
Date.....
Official Position

THE SCHOOL BEAUTIFUL

Sir Michael Sadler made a welcome plea before the Conference of Educational Associations for giving the artist a chance to cheer up our school-rooms. We progress steadily in our concern for the physical health of the school child. The doctor keeps an eye on him. He is secure of a meal. We strive to avoid overcrowding him in class. The quest for an educational system that shall turn him out a yet better citizen is endless. But we still pay lamentably little attention to the aspect of the building in which he spends the days of the most formative part of his life. The modern school is cleaner, brighter, and warmer than its predecessor, but there is usually little to distinguish the walls of a classroom from those of a station waiting room or a surgical ward. Indeed, from the monastic aspect of most of them, a foreigner might conclude that we still in Britain suffer from a puritanical complex that regards all art as a rather disgraceful distraction with which the young should have no concern. If the average child emerges from school with any esthetic taste he seldom has his surroundings to thank. Yet what a fruitful gallery might be made of the acreage we possess of schoolroom walls! Sir Michael Sadler urges that in decorating school buildings educational authorities should make use of the talent of our younger painters, and that on the walls should be hung reproductions of great works, ancient and modern. If his policy were followed, the stimulus to our appreciation of art as a people would be incalculable, and the outlook for the artist in England proportionately happier. — *Manchester Guardian*.

Every One of These Features SAFEGUARDS LIFE—JUSTIFIES COST



ALL-STEEL SCHOOL BUS **SUPERIOR** BODIES

- 1 . . One hundred per cent all-steel and fire-proof construction in every detail.
- 2 . . All glass shatter-proof.
- 3 . . Continuous steel floor covered with non-slip linoleum.
- 4 . . Steel safety tread on entrance steps.
- 5 . . Outside gas tank.
- 6 . . Absolute elimination of exhaust fume hazard.
- 7 . . Ample ventilation. All side windows equipped with regulators.
- 8 . . Full, unobstructed vision from all parts of interior, including safety window in lower panel of entrance door.

14
POINTS

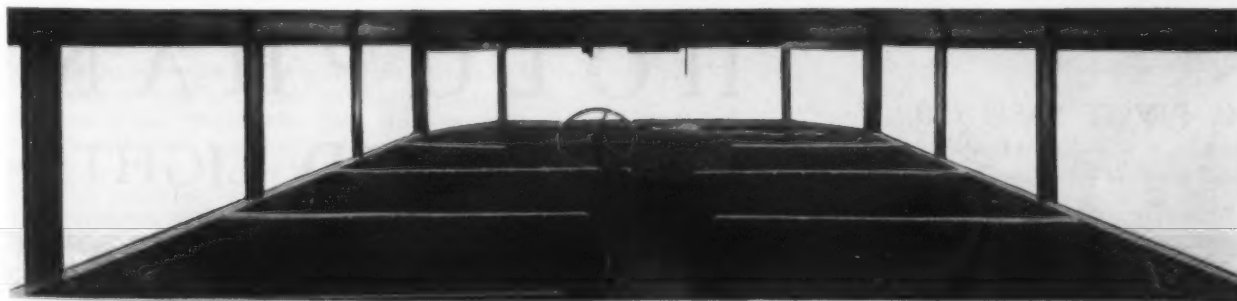
**SAFETY AND
DURABILITY
AT A
NEW LOW PRICE**

- 9 . . More seating capacity for any given length. The same comfort and safety in transportation as are enjoyed in the modern school building.
- 10 . . Economy and security of mounting on any chassis.
- 11 . . Quietness—anti-rumble construction.
- 12 . . Long life—the All-Steel Superior will far outlast any other school bus made.
- 13 . . Low price.
- 14 . . Tested and proved. Scores of All-Steel Superior Bodies in use have established the fact of Superior performance. One Superior bus has already been operated 60,000 miles with no sign of wear—10 years of usual mileage.

When you provide All-Steel Superior Bus transportation for school children you provide the greatest measure of safety obtainable at any price, and the maximum of durability that settles for all time with one investment the matter of school transport equipment. Study the specifications point by point, and you will see that you cannot afford not to specify this new modern all-steel Superior unit.

All-Steel Superior School Bus Bodies are obtainable from any local automobile dealer, mounted on any 1½-ton truck chassis you select. Four stock sizes and various seating arrangements accommodating from 33 to 80 pupils. Write for complete data.

SUPERIOR BODY COMPANY
LIMA, OHIO



Complete visibility in all directions with no sacrifice of strength.



Genuine steel safety treads on both steps of entrance eliminate slipping and stumbling and never wear out. Full vision of outside entrance area afforded driver by safety glass in lower panel of entrance door.



High School, Dumont, New Jersey (above)
Hacker & Hacker, Archts.
Fort Lee, New Jersey

South School, Lancaster, Ohio (below)
Vernon Redding and Associates, Archts.
Mansfield, Ohio



Better Vision—

Through easier cleaned

Williams Pivot Windows

Authorities claim that a soiled window reduces the incoming light by 30% to 70%. Williams Pivot Sash Windows are quickly and easily cleaned from *inside* the room with *absolute safety*. This convenient method means that the windows will be cleaned more frequently, and thus automatically assures a better incoming light. Williams Reversible Window Equipment also controls ventilation. Both upper and lower sash can be tilted to any desired angle—eliminating dangerous drafts. Send for new illustrated catalog showing widespread and repeated school use.

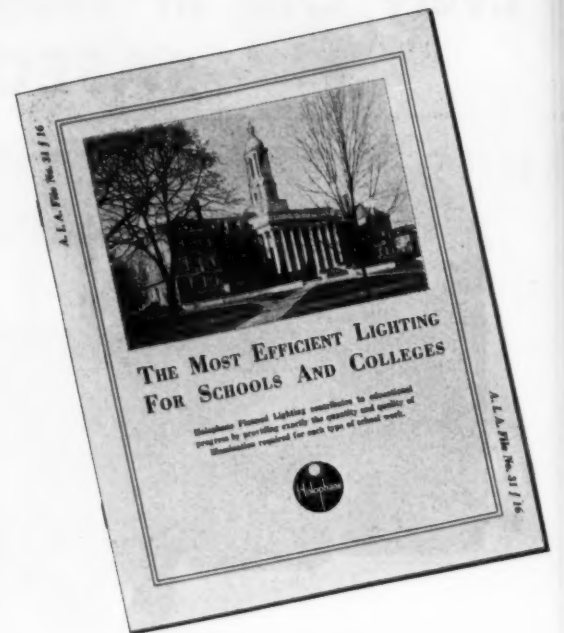
THE WILLIAMS PIVOT SASH CO.

East 37th St. at Perkins Ave., Cleveland, Ohio
For 28 years manufacturers and installers of

**WILLIAMS REVERSIBLE
WINDOW EQUIPMENT**

Clean Your Windows from the Inside

To Help You Plan the Lighting of *Your* School



This new booklet is just off the press. It describes the standards of illumination established by good practice over a period of years, and shows how to attain these standards economically. It is alphabetically arranged for quick reference, and illustrated by photographs of efficient lighting installations in leading schools and colleges. Its purpose is to help you obtain the greatest educational values from your lighting. A copy is yours for the asking.

The services of Holophane engineers are available, through your own architect or electrical engineer, for the illumination of new buildings, or the re-lighting of old ones. — Address Holophane Co., Inc., 342 Madison Ave., New York. Offices also in Chicago, San Francisco and Toronto.

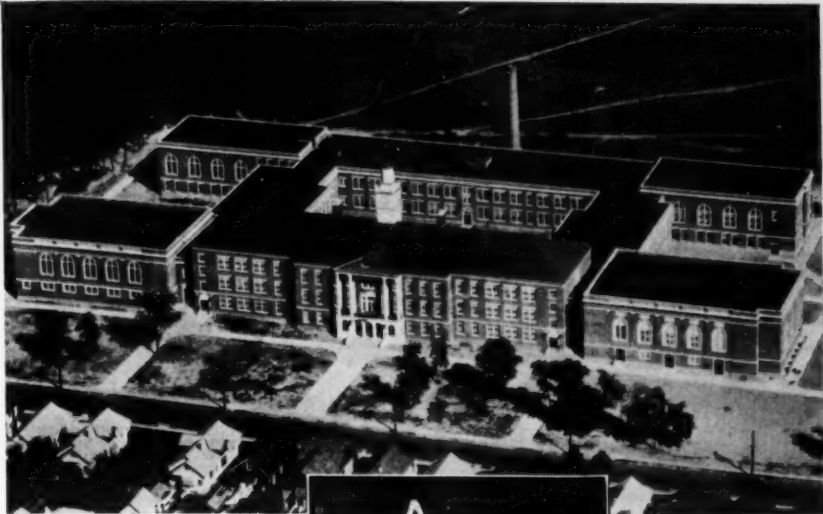
H O L O P H A N E

PLANNED LIGHTING



*produces the greatest amount of
useful light from Mazda lamps*

This SCHENECTADY high school



● Mount Pleasant High School, at Schenectady, N.Y. Jobber: Harvey B. Kimmey, Albany, N.Y. Plumber: Levi Case & Co., Schenectady, N.Y.

● Halsey Taylor No. 605. Heavy vitreous china wall drinking fountain with integral trap housing; 2-stream mound building projector; Taylor automatic stream control.



● Halsey Taylor No. 623. Heavy vitreous china wall drinking fountain with integral trap housing; equipped with oscillating lever handle glass filling faucet through back; 2-stream mound building projector and Taylor automatic stream control. All exposed fittings chromium plate.



MAKES SANITATION SURE

● School authorities play safe in specifying drinking fountains by choosing Halsey Taylor fountains. The patented two-stream projector gives you a drinking mound that is always convenient and sanitary while the practical automatic stream control provides a constant drinking stream of uniform height regardless of pressure variation. ● Only a Halsey Taylor has these Halsey Taylor advantages. For 1932, play safe—specify Halsey Taylor fountains. Have you our latest catalog?

THE HALSEY W. TAYLOR COMPANY • WARREN, OHIO

HALSEY TAYLOR

DRINKING FOUNTAINS

School Board News

◆ New Britain, Conn. Following a vote of the members, the school board decided to accept a voluntary contribution of 10 per cent of teachers' salaries for the period of one year. A proposal to give all teachers a 10-per-cent reduction in salary failed to be approved.

◆ Rutland, Vt. The board of aldermen recently asked that school teachers accept a voluntary cut of 10 per cent in their salaries, along with other city employees, in order to effect a reduction in city expenses during 1932.

◆ New Bedford, Mass. Supt. Allen P. Keith, in his annual report to the school board, presented proposals for a reduction of the teaching staff, the enlargement of classes, and the redistribution of work. The report stressed the necessity for retrenchment, despite overcrowded conditions in some of the schools, and commended the teaching staff for maintaining a high morale in the face of adverse conditions.

◆ Wilmington, Ohio. Teachers in Clinton county were not paid in full in December, but were obliged to wait until January for their salaries. About 20 per cent of the teaching force were not paid in December.

◆ Denver, Colo. The Washington Bicentennial will form the main feature of the annual play festival of the city schools, to be held on March 4, in the city auditorium. The children will reproduce events in the childhood, youth, and manhood of the first president. There will also be various dances typifying the people and customs of the thirteen colonies. These will constitute the prelude to the festival which is to be given to traditional and historic events in the life of Washington. The festival which is to be given under the direction of the department of health education, will offer opportunity to the citizens and school patrons to witness the celebration of the two hundredth anniversary of Washington's birth.

◆ Bellingham, Wash. Social work among the families of children in the schools has been carried on under the direction of the attendance officer and the president of the parent-teacher association. About 45 families in the community have been provided with food and clothing.

◆ Richmond, Va. A unified cafeteria system has been in operation in the schools since the opening of school in September. Under a new policy, 25 separate cafeterias have been consolidated under one manager, with a central accounting system.

◆ The schools of Morristown, Tenn., have discarded all outside telephone connections. While this will cause a saving of \$6,000 annually, Supt. R. L. Jones stated that it was not an economy measure. He said: "Schools and, in particular, the principals, have been troubled to such an extent by numerous phone calls we have decided to discontinue all outside connections except in cases of urgent business."

◆ Detroit, Mich. Dental service for needy children in both the public and parochial schools has been provided at greatly reduced rates by local dentists as a contribution to the mayor's general relief program. The plan involves the services of more than 1,000 dentists all over the city.

◆ Thief River Falls, Minn. Under the direction of the home-economics instructors, hot lunches are being served to 100 pupils on cold and stormy days. The lunches are provided at cost and the surplus goes toward the purchase of food materials. Each lunch costs 2½ cents.

◆ Mr. Franklin Behm, principal of the junior high school, Anacortes, Wash., during the past few months has taken a lesson from the rotary organization by eating each Friday with the various home-room presidents of his school. Mr. Behm declares that the weekly meeting has resulted in a better understanding with the student leaders, and the leaders themselves have passed on to their groups the purposes of school policies. A fine spirit of

coöperation has been effected as a result of the policy inaugurated.

◆ Anacortes, Wash. Admission to a high-school basketball game recently was by the payment of an article of food or clothing. More than 600 persons attended the game and the local Salvation Army was made the recipient of the collection of clothing and food.

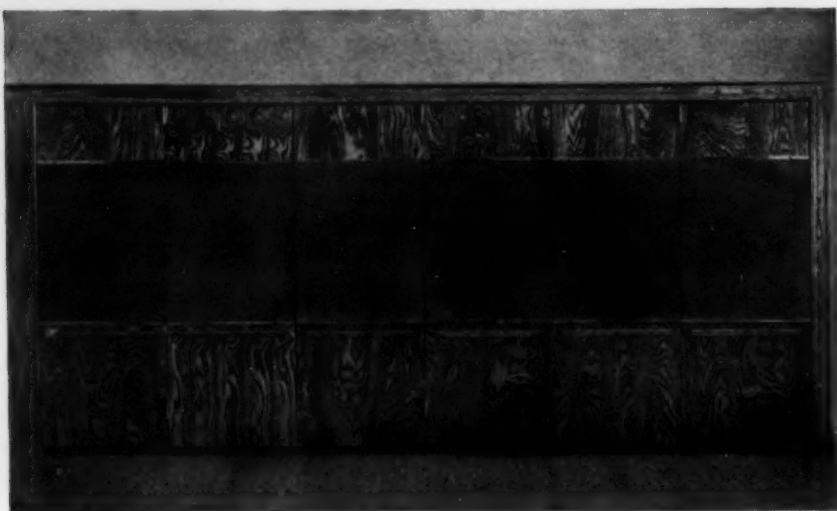
◆ Kenosha, Wis. The school board has under advisement appeals of eighteen teachers from a recent decision to remove married women teachers who have not been in the school system for more than 10 years. Forty teachers are affected by the decision, 18 of whom claim dependents.

◆ Fond du Lac, Wis. Teachers' salaries have been reduced from 4 to 10 per cent by the school board, as part of an economy program. The reductions, totaling \$33,000 for the school year 1932-33, become effective next September. The board has also discontinued its summer recreational program as a means of meeting the budget.

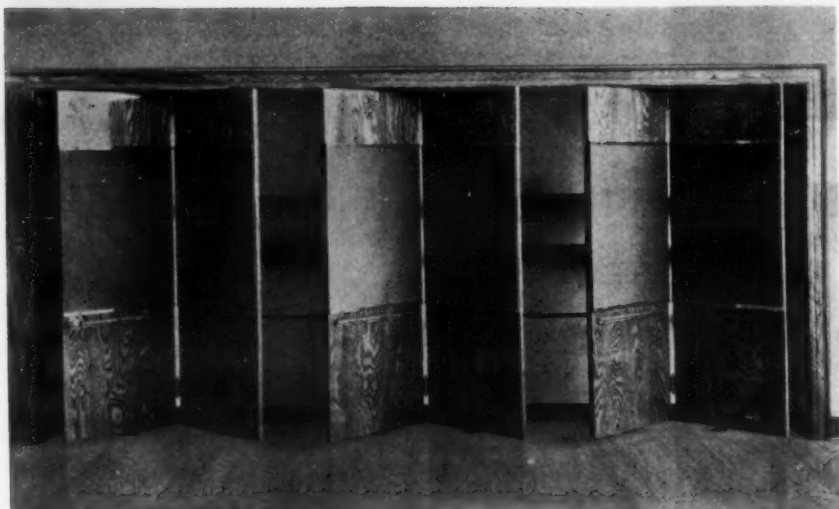
◆ The board of education of Youngstown, Ohio, proposes to abolish all standing committees. President Guy T. Ohl is convinced that this policy will bring all the members of the board into more intimate touch with its duties and responsibilities. It will be made in response to a survey made by the U. S. Office of Education in which the recommendation is urged that, "Standing committees of the board of education should be abolished and the rules and regulations of the board should specifically state that the superintendent of schools is the chief executive officer and that he only is responsible for the conduct of the schools."

◆ The question of free speech accorded to those connected with the school system recently came under discussion by the Detroit board of education. The result was the adoption of the following resolution: "Teachers may feel free to discuss and to express their honest opinion, outside of the classroom, upon all subjects, including social, political, and economic questions, without fear of official reprimand or coercion on the part of anyone connected with the board of education."

◆ The Ann Arbor, Mich., board of education has adopted a rule, whereby no solicitations may be



Blessed Sacrament School
Syracuse, N. Y.



NATURALLY

*one School Wardrobe
must be better than others*

Circle A School Wardrobes are designed and constructed—to present a good appearance through harmonious proportion and finish—to provide scientifically correct, well ventilated accommodations for wraps—to give the maximum amount of wardrobe per dollar. Built so strongly and so well they stand up under the very hard knocks of school service. Ask for new, illustrated catalog giving detailed description, photographs and plan drawings.

NEWCASTLE PRODUCTS INC.

690 South 25th Street, Newcastle, Indiana

Also manufacturers of: Circle A Folding Partitions, Rolling Partitions, Steel or Wood Portable Bleachers, Portable Steel Grandstands

CIRCLE A
School Wardrobes

undertaken in the schools, without the consent of the board of education. Charles R. Henderson, a member, said: "Some of the schemes involve the use of school children for high-pressure sales methods. It involves the question of whether we are to permit any organization within a high-speed promotion scheme to use the schools to put it through. And it involves the question as to whether school children should be permitted to practice an organized sales campaign in competition with merchants or other taxpaying agencies."

♦ The supreme court of Wisconsin has ruled adversely in the case of certain property owners of Watertown, who sought detachment from the city and from the school district, the boundaries of which are coterminous with those of the city. The property which, under the ruling, remains within the jurisdiction of the city and the school district, is valued at approximately \$280,000.

It appears that the city of Watertown had been designated as a city of the third class in May last. This change in classification removed the school district from the operation of the township library law and required that the amount formerly raised and withheld by the county treasurer for library books be raised directly by the district.

The board of education of Lombard, Ill., has fixed its school-hall rentals as follows:

Recitals, \$5 a night; outside teachers, \$10 a night. Clubs where no admission is charged, \$2; afternoon free.

Political meetings, evenings, \$5; afternoon (extra janitor service required), \$1.

Any meetings or entertainments where admission is charged, \$10. P.T.A. free. Parochial-school graduation free.

♦ Rolla, Mo. In sacrificing the annual exchange of presents within classes at Christmas, the students in the junior and senior high schools were able to assist six needy and deserving families and the mutual-aid society of the city was materially benefited.

Under the plan, each student instead of drawing names and giving presents, contributed 25 cents toward a silver offering which was placed in the class box. The six boxes of money were then turned

over to the local society for the purchase of food and groceries for needy families.

♦ Bucyrus, Ohio. Pending the sale of additional school bonds amounting to \$80,000, the city school board has authorized the sale of 40 per cent on outstanding claims.

♦ Rochester, Minn. The city council has reduced the school-tax levy from \$351,941 to \$286,825, with a saving of \$65,116. The council's action has no bearing on salary and instruction costs, since the reduction affects only the permanent-improvement fund.

♦ Beginning June 1, 1932, the state board of education will require four years of work on the part of teachers' college graduates before issuing life certificates. In the past, the teachers' colleges have issued life certificates upon the completion of three-year courses of 144 hours. After September, 1936, all certificates will require the completion of four years' work of 192 hours.

♦ The attorney general of the State of Wisconsin has ruled that school authorities and local municipal and village authorities are not permitted to place stop signs before school buildings in order to control traffic on streets adjoining school buildings. Such signs may only be placed at intersections of streets to control passage over intersecting highways.

♦ Attorney General Carlstrom, of Illinois, has rendered an opinion that there is nothing in the law which forbids a school-board member from voting a contract to an employer, unless a pecuniary profit to the board member is involved in the transaction.

♦ El Monte, Calif. The school board has recently completed an auditorium-cafeteria building. The cafeteria which is located in a part-basement, is entirely modern, and provides facilities for 750 persons. The auditorium seats 1,250 persons, and is equipped with a balcony and stage of ample proportions to accommodate the needs of the school for amateur productions.

The building was financed by direct taxation, instead of a bond issue, under a new policy of the school board. It is expected that funds necessary for the furnishing of the auditorium will be available next year.

♦ Teachers who decline to submit to a medical examination upon order of the board of education

of New York City will be considered guilty of missubordination. The present rule on the subject is said to require strengthening in order to make it effective.

♦ Quotations from the Bible may be read in the public schools of New York City, under a recent ruling of the Court of Appeals, which affirmed the judgment of the lower court. The court dismissed the appeal of Joseph Lewis, president of the Freethinkers' Society, who sought to prevent such reading, on the ground that the purchase of Bibles and hymn books is a waste of money. He contended that public money could not be used for the purchase of religious books.

♦ Wauwatosa, Wis. The board of education has begun the erection of the first unit of a junior high school on the south side. The building, which contains the usual quota of classrooms and a large gymnasium, will be completed at a cost of approximately \$300,000. It will be ready for use in September, 1932.

♦ Silsbee, Tex. The school board has recently completed the erection of a senior high school. The building contains twelve classrooms, in addition to a library and an auditorium, and provides accommodations for 260 students. The old high-school building has been remodeled for use as a grammar school.


♦ The Teachers' Union, of New York City, in order to relieve the unemployment situation among teachers, has made the following recommendations: (1) Additional teachers for backward children. (2) The reduction of size of classes. (3) That visiting days be allowed again. (4) That a bureau of employment in the several school districts be created, etc. Supt. William J. O'Shea does not regard the changes as practical or necessary.

♦ Shelton, Conn. The school board has voted to retain its previous ruling governing the employment of married women teachers. Under the policy, the contracts of married teachers in the schools will not be renewed in the spring.

♦ Wauwatosa, Wis. The senior high school anticipated an increase of 50 students in its enrollment during the second semester of the school year. As a result, the school board voted to employ an additional teacher to take care of the increased load.

♦ Vancouver, Wash. In November last, each teacher in the city schools subscribed one twentieth of his month's salary, or a day's pay, for the welfare work of the city. A large amount of the money was spent in providing needy school children with lunches and meeting other needs. Two of the grade schools maintain a cafeteria, where one hot dish is furnished.

...The lowest price in 19 years for the finest plumbing in history...

 If your school plumbing and heating plants need modernizing, now is the time to do it!

Today you can buy Crane quality, Crane service, and Crane operating economy at costs so low that you would have to turn the calendar back two decades to equal them.

Throughout the entire Crane line revisions have gone into effect which have brought down prices to 1913 levels.

Bear in mind, these revisions touch price alone, not in one single instance have they been reflected in lowered quality.

In the interests of your school, take advantage of this fact. With Crane plumbing at these new, low prices, with the most skilled labor available and anxious to work, you have the greatest opportunity in modern times to bring your school up-to-date in service and sanitation. To increase its efficiency and to lower its operating costs.

Go to the nearest Crane National Exhibit Rooms or write Crane Co. for details on its complete line of school plumbing and heat-



Schools need wait no longer to install dependable modern plumbing materials. This Corwith vitreous china wall drinking fountain C9060, for example, can be installed for less than an inferior fixture would have cost just a few weeks ago.

• • •

ing materials and on the new, low prices. Talk to your contractor and learn for how little a modernizing program can be carried out under the Crane Budget Plan.

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO
NEW YORK: 23 W. 44TH STREET



Branches and Sales Offices in One Hundred and Ninety Cities



CRANE

PETERSON *all-Steel* CHECKROOM EQUIPMENT

Has New Refinements in Design and Construction

but there's no change in the
time-saving, accurate
ONE-CHECK SYSTEM



The Peterson Checkroom System is fully protected by U. S. Patents.

This simple system (whereby one check serves to identify ALL items checked) is practically error-proof; and the racks by which this system operates have now been modernized through such refinements as the decorative ends.

The stationary racks are similar to the portable types illustrated, but with rubber vacuum-cup insets instead of casters. This eliminates any necessity for anchoring . . . Additional units available for use with the "One-Check System" include Umbrella Racks, Overshoe Racks and Baggage Racks.



To parties interested in efficient checkrooms we will gladly submit proposed lay-outs either for the modernizing of old checkrooms or for the arrangement of new ones. This service is entirely free. Write for details.

VOGEL-PETERSON CO., INC. - - - - - 1809 North Lincoln Street, CHICAGO

A RACK FOR EVERY PURPOSE

providing maximum capacity in minimum space

PERSONAL NEWS

♦ **PROF. MILO H. STUART**, assistant superintendent of schools of Indianapolis, and **DR. D. H. EIKENBERRY**, of Ohio University, have been appointed on a special committee which is to conduct a survey of the Chicago high-school system. The committee will work under the direction of **DR. GEORGE D. STRAYER**, director of the survey.

♦ **MR. E. M. HOSMAN**, for ten years secretary of the Nebraska Teachers' Association, has been appointed director of the Omaha University extension and publicity department. **MR. R. R. MCGEE**, of Columbus, succeeds **MR. HOSMAN**.

♦ **MR. ROY FROST** and **MR. E. E. BLOOM** have been elected as new members of the board at Hutchinson, Kans.

♦ **MR. J. E. MERRITT** has been elected as a member of the board at Clarksdale, Miss.

♦ **DR. A. C. BARRY** has been elected a member of the school board at Norfolk, Nebr., to succeed **Walter Duda**.

♦ **REV. P. S. ATKINS**, **MR. O. C. EVERHART**, and **MR. JAMES J. LOGAN** have been elected as new members of the school board at York, Pa.

♦ **MR. G. E. DELLE**, superintendent of schools at Maplewood, Mo., since last June, has been given a three-year contract, beginning with July 1, 1931. The contract calls for an increase of \$500 in salary with the beginning of each year.

♦ **MR. JAMES H. RICHMOND**, of Louisville, Kentucky, has been appointed State Superintendent of Public Instruction, to succeed **W. C. Bell**. **Mr. Richmond** assumed his new duties on January 4.

♦ **MR. WILLIAM A. REILLY**, who has just been elected chairman of the Boston school board, is the youngest man to assume that office. **Mr. Reilly**, in his inaugural address, discussed school problems and pledged himself to a policy of retrenchment in the annual school expenditures which approach \$22,000,000 yearly.

♦ **WILLIAM J. SHRODER** was reelected president of the Cincinnati board of education. **JEROME CLARK** is the new member on the board.

♦ **MR. C. T. BONNEY** has been elected vice-chairman of the school board of New Bedford, Mass.

♦ The school board of Worcester, Mass., has reorganized for the year, with the election of **MR. W. J. COOKSON** as president, and **DR. ALBERT FARNSWORTH** as vice-president.

♦ The school board of Vancouver, Wash., has reorganized for the school year 1931-32, with the election of **MR. LOUIS SCHAEFER**, **MR. A. P. RYAN**, **MR. HARRY**

CRAIG, **MR. HOWARD WARREN**, and **MR. RALPH DICKSON** as members.

♦ **SUPT. L. P. GOODRICH**, of Fond du Lac, Wis., has been reelected for a new three-year term.

♦ **MR. CHARLES LANSDOWN**, 51, president of the school board of Lynbrook, L. I., N. Y., died in the local hospital on December 28, after a brief illness. **Mr. Lansdown** was serving his sixth term as a member of the board and his second term as president.

♦ **MR. E. M. VAN CLEVE**, principal of the New York Institute for the Blind, and a former school superintendent, has been given the Leslie Dana gold medal for his outstanding work in the prevention of blindness and the conservation of vision. **Mr. Van Cleve** is a graduate of Ohio Wesleyan University, and had previously served as superintendent in a number of school systems before his appointment as head of the Ohio School for the Blind in 1907.

♦ **SUPT. W. W. ANKENBRAND**, of Athens, Ohio, has completed his graduate work for the doctor of philosophy degree to be given by New York University.

♦ **DR. MELVIL DEWEY**, well-known educator, died at his home at Lake Placid, Fla., on December 26. **Dr. Dewey**, who was 80 years old, was the inventor of the Dewey decimal system of classification for libraries and was one of the leading advocates of simplified spelling.

♦ **MR. H. A. RICE**, of Grafton, W. Va., has been elected superintendent of schools at Huntington, to succeed **C. L. Wright**.

♦ **MR. E. G. KUHN**, formerly principal of the high school at Grafton, W. Va., has been elected city superintendent of schools, to succeed **H. A. Rice**.

♦ The school board of Altoona, Pa., has reorganized for the school year, with the election of **MR. ROBERT MCKIBBEN**, **MR. W. E. BARCLAY**, **MR. D. M. SELL**, and **MR. D. B. GETZ** as new members.

♦ **MR. O. R. DEARL** has been elected a member of the school board at South Bend, Ind.

♦ Canton, Ohio. The school board has reorganized for the year 1932, with the election of **MR. L. E. SOUVERS** as president, **MR. H. N. BOWMAN** as vice-president, and **MR. JOHN F. ROOS** as clerk-treasurer.

♦ **SUPT. I. J. VOGELSON**, of Grayson, Mo., has been reelected for a new three-year term.

♦ **SUPT. T. H. MAHAN**, of Huntington, Ind., who was elected for a four-year term a few years ago to succeed **Clifford Funderburg**, has two more years of his term to serve. His term expires in June, 1933.

♦ **JOHN HAY**, 74, superintendent of schools at Mt. Carroll, Ill., died on January 6, following an automobile accident.

♦ **SUPT. G. N. CHILD**, of Salt Lake City, Utah, has been reelected for a new term, beginning with July, 1932. **Mr. Child**, who was reelected for a seventh consecutive term, is at present completing his twelfth year of service in the schools.

♦ **MR. MILTON J. FLETCHER** has resigned as superintendent of schools at Jamestown, N. Y., the resignation to take effect on August 1. **Mr. Fletcher** has been elected as superintendent emeritus.

♦ **Mr. Fletcher** has completed 33 years of service in the Jamestown schools, the first twenty years as principal of the high school, and the last thirteen as superintendent. During this period, he saw the high school grow from 454 students and 15 teachers, to a school of 2,242 students and 84 teachers.

♦ **SUPT. A. P. BURKHARDT**, of Norfolk, Nebr., has been reelected for a new three-year term.

♦ **MR. P. P. CLAXTON**, president of the Austin Peay Normal School at Clarksville, Tenn., has been elected president of the Tennessee School Officers' Association. Other officers elected were **MR. R. L. JONES**, Memphis, vice-president, and **MR. P. L. HARNED**, Nashville, secretary.

♦ **MRS. JESSIE M. EDGERTON** has been elected president of the school board at Cadillac, Mich. Other members elected were **MR. R. S. HARTLEY**, vice-president, and **MR. H. L. WORDEN**, secretary.

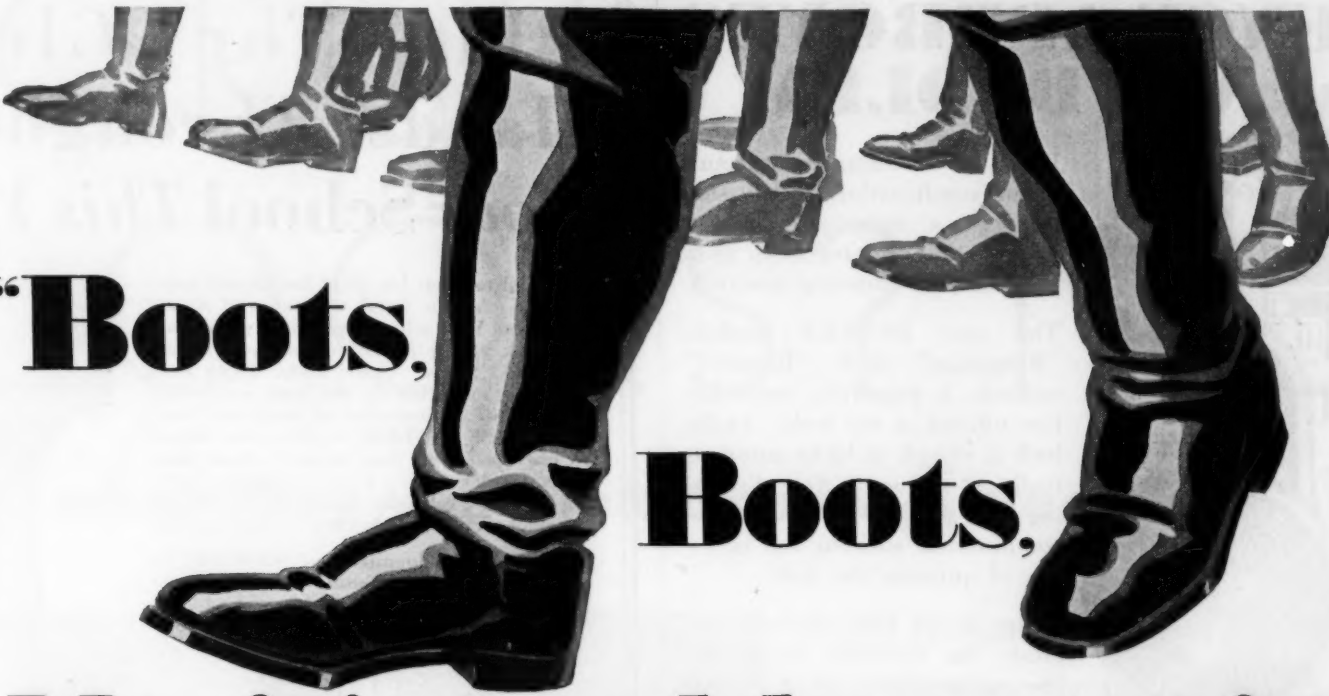
♦ **MR. RUSSELL WILLSON** has been reelected as president, of the school board at Indianapolis, Ind. **MR. JULIAN WETZEL** was named as vice-president for a third term.

PROF. O'SHEA DIES

Michael V. O'Shea, 66 years old, professor of education at the University of Wisconsin since 1897, and author of books on educational subjects, died suddenly on the grounds of the University on January 14, following an attack of heart disease.

Born at LeRoy, N. Y., **Dr. O'Shea** was graduated from Cornell in 1892, and became professor of psychology and education at the Mankato State Normal School. In 1895 he resigned to accept a similar position at the Teachers' College in Buffalo, where he remained for two years before going to the University of Wisconsin.

Dr. O'Shea conducted various scientific experiments which attracted wide attention. In recent years he had conducted a survey of the all-year schools in Newark and of the educational systems of Mississippi and Virginia. Various aspects of the problem of education were dealt with in a score or more of books written by **Dr. O'Shea**, with particular emphasis on the problems of childhood.



"Boots, Boots, Movin' up and down again

Men—men—men—men—men go mad with watchin' 'em—
An' there's no discharge in the war!"— *Rudyard Kipling*

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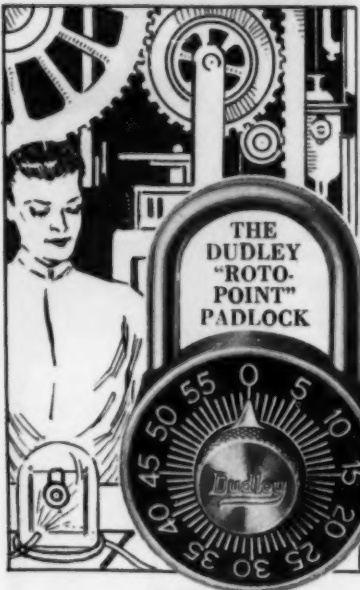


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POSSIBLE ECONOMIES IN SCHOOL ADMINISTRATION

(Concluded from Page 31)

volve correcting defects in the electric wiring, or in the removal of fire hazards from basements, attics, or elsewhere. Many boards find the five-year term most desirable, because the rate for five years is only four times that for one year. Coinsurance is most economical if a board wishes to purchase protection for 80 per cent of the value of the property. In this case, the rate may be only 75 per cent of what it would be without the coinsurance clause. After the insurance has been written, it is necessary for the board to give constant attention to changes that may occur which render it possible to reduce the premiums from time to time.

Reducing Cost of Indebtedness

Not much can be done to economize on indebtedness after debts have been incurred, yet there are procedures which can reduce the cost of debts in some districts. If a board was so fortunate when its bonds were sold as to provide a "call" clause, it could recently have effected a worth-while saving in interest. Even at prevailing bond prices, it might still be able to do so by calling outstanding bonds, and reissuing the same at a lower rate of interest. School bonds sold during the past eight months have yielded lower than 4 per cent. Schools in the State of Kansas sold their bonds to the state school-fund commission at an interest rate as high, or higher, than 5 per cent and will refund them at $4\frac{1}{4}$ per cent in accordance with a law enacted by the last legislature.

Great Reductions in Costs

Great reductions in cost are possible through a careful study of school organization and the direction of the personnel of a school system for the very simple reason that teachers' salaries

average between 65 and 75 per cent of the total annual expenditure of a board of education. At the same time irretrievable damage may be caused by making injudicious and unwise reductions as they relate to the personnel.

While modern buildings, adequate supplies, and up-to-date equipment are highly desirable, they cannot compare in importance with well-trained, devoted, dynamic teachers in the maintenance of effective schools. Anything which affects the teaching and supervisory personnel should be done with a clear recognition of the importance of this statement.

As Governor Woodring, of Kansas, recently stated in a newspaper article, "The need of the times is not so much reduced salaries, as better teachers and results, so that a fixed purpose may be instilled into the minds of the young to become really educated." It is possible in many school districts to effect economies so far as personnel is concerned, through a sensible reorganization which will eliminate small schools maintained for the few at an excessive cost.

Just as great wastes, and in some instances, less justifiable ones, are occurring in the organization and administration of larger school systems. Economies can be effected in many of these through requiring a minimum number of pupils for the maintenance of a high-school class. It is generally recognized that at least 30 pupils can be effectively taught in the average class. We shall probably learn that even a larger number can be satisfactorily cared for in one class. Yet, there are many instances in which classes of approximately a quarter to a half of this number are being supported in the state at the present time. In four fairly large schools with which I am well acquainted, 4 classes are now maintained with an enrollment of 5, 2 with an enrollment of 7, 1 with an enrollment of 8, 3 with an enrollment of 9, 3 with an enrollment of 10, 8 with an enrollment of

15, 3 with an enrollment of 15, 11 with an enrollment of 16, and 4 with an enrollment of 17.

In other words, 492 pupils are accommodated in classes which could care for 1,170.

In a smaller high school, 3 classes have an enrollment of 5 pupils, 3 of 7, 1 of 8, 3 of 9, 2 of 10, and 1 of 13. Again, may I repeat that, if the people are willing to support classes of this size they have no cause to complain about the cost of education. The remedy for such a condition should be rather evident.

The final method for effecting economies in school administration, but none the less effective, is the development of a spirit of coöperation and thoughtfulness among children, teachers, principals, and custodians. In our own school, we have a thrift committee composed of representatives from each school, whose purpose it is to discover wastes and to effect savings in regard to them. In some of the schools there are committees of children for the same purpose. When all is said and done, however, it must be agreed that there is no panacea for reducing school costs. There is no patent method whereby expenditures may be lowered and a satisfactory quality of education provided. But by honest, conscientious, intelligent, thinking and planning, by reducing a little here and there, and by eliminating conscious or unconscious wastes, it will be possible to give relief to taxpayers and to maintain good schools for their children.

♦ Sioux City, Iowa. A radio-ear has been installed in the day school to aid deaf children in learning to speak. Pupils in the schools have been tested for hearing defects by means of an audiometer. Follow-up of serious cases has been made by principals and school nurses, and parents have been urged to begin remedial treatment by a specialist of their choice.

♦ Toledo, Ohio. The financial affairs of the school system have acquired additional complications due to the fact that the interest rate on deposits of school funds has been reduced from 4.125 to 2 per cent. The estimated shrinkage in the school income is \$150,000.

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The "Vanishing Door" hinges on which the doors are hung are made with double pivoted arms and swing the doors back into the wardrobe entirely out of the way. There are no noisy tracks nor rollers to stick or bind, nor intricate mechanism to get out of order. These hinges are guaranteed to last as long as the building.

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WASHINGTON, INDIANA, U. S. A.

BONDING SCHOOL OFFICIALS

(Concluded from Page 38)

18. What are the local state laws or court decisions relating to the liability on his bond?

19. Has he sufficient training or experience to fit him for his position?

20. Does he have a good character or reputation?

21. Is he inclined to live "high" or to be extravagant?

22. Does he have any financial standing so that in the event of a loss beyond the penalty of the bond, recourse may be had to his personal estate?

When the preceding list of questions is considered, it is easy to understand why no definite rule regarding the penalty of a bond can be made to cover all the different official positions. Perhaps the most important single item to be considered is the amount of money handled during the term of office. The more money, the larger should be the penalty in the bond. However, it is not necessary to increase the amount of the bond in direct proportion to the increase in amount of money handled, for it is more difficult to cover up a large shortage of funds than a comparatively small one. Also, as a general rule, better qualified officials and better business procedures are employed in administering the larger funds. However, the amount of the bond is not so important as is the fact that a bond is required, for perhaps the greatest value of a bond is its moral effect in warning the individual to avoid wrong.

Who Should Pay the Bond Premiums?

General practice regarding the payment of bond premiums on public-official bonds varies throughout the country. In some cases the officials are required to furnish the bonds at their own expense. This is a bad practice for the officials may attempt to provide the worthless

type of personal bond in place of the more desirable corporate surety bond. Some officials may also attempt to let the bond "slide," and if there is no adequate check on this requirement the public may be unprotected.

It appears that in the majority of instances public-official bond premiums are paid out of public funds. This is just and proper. A bond is an insurance policy protecting the public funds. One does not ask a tenant to pay the fire-insurance premium on rented property. It is the landlord's property that is protected against fire loss. By analogy, one should not ask a public official to pay insurance to protect the public funds. When the premiums are paid for by the public the use of corporate surety bonds is encouraged, which is an important consideration.

While the statutes in some of the states are very indefinite regarding the payment of the bond premiums, the more recent legislation shows a very definite trend toward the elimination of personal bonds with provisions for the payment of corporate surety bond premiums out of public funds. This is the superior method.

COOPERATION FOR ADMINISTRATIVE EFFICIENCY

(Concluded from Page 34)

respect to the purpose of approach we will find in an analysis of the activities the following have been substantially proved to be carried on in the light of our decalogue of principles established in the first section. In some cases, responsibility may be delegated by the board of education and a corresponding responsibility assumed by the superintendent, and at other times the board shall act as the accepting committee to recommendations presented by the superintendent. In all cases in which the duties of the board of education are legally stated, these duties should be carried out upon the recommendations of the administrative officer.

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Conclusions

1. There is a general recognition among administrators and specialists in school administration that the superintendent is a specialist along instructional lines.

2. The chief duty of the superintendent is to specify the needs of the community, to formulate policies for satisfying such needs, and to recommend to the board of education the adoption of such policies.

3. Since the superintendent is a specialist in the educational field, he must present his recommendations with firm conviction, based upon evidence which will support his recommendations to the board of education.

4. There must be a feeling of wholesome co-operation, unified responsibility, and conscientious action on the part of the board of education and the superintendent, before the complete education can take place in any community.

THE GROVER CLEVELAND HIGH SCHOOL, NEW YORK CITY

(Continued from Page 42)

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Girls' auxiliary gymnasium, 3,230 sq. ft.	Principal's secretary's office
Girls' gymnasium administrative office	General office
Two girls' gymnasium storerooms	Administrative assistant's office
Twenty-two classrooms	Statistical office
Two hygiene classrooms	Record room
Chemical laboratory	Teachers' workroom
	Evening school office
	Grade adviser's office
	General organization
	Attendance office

(Concluded on Page 95)


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Fig. 732—General view of the "HALLOWELL" Work-Bench of Steel, with back board, end pieces, etc. Carried in stock.

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(Concluded from Page 92)

Five offices
Custodian-engineer's office
Bank
Store
Three janitor's sink closets
Seven supply closets
Storeroom
Dust chute

Blower room
Elevator
Girls' toilet
Two boys' toilets
Women teachers' toilet
Men teachers' toilet
Two women's toilets
Men's toilet

Second Floor

Nineteen classrooms
Three typewriting rooms
Four drawing rooms
Drawing office
Drawing storeroom
Music room
Two biology laboratories
Biology preparation room
Biology storeroom
Physics laboratory
Physics lecture room
Physics preparation room
Physics storeroom

Physics office
Three offices
Two storerooms
Three janitor's sink closets
Six supply closets
Dust chute
Fan room
Motion picture booth
Two girls' toilets
Elevator
Two boys' toilets
Women teachers' toilet
Men teachers' toilet

Third Floor

Twenty-one classrooms
Library, 160 sittings
Teachers' alcove, 12 sittings
Workroom
Stock room
Library classroom
Music room
Drawing room
Sewing room
Fitting and storeroom
Office-practice room
Cooking room
Cooking closet
Two general science rooms
General science preparation room

General science storeroom
Physics recitation room
Biology office
Three offices
Women teachers' restroom
Men teachers' restroom
Three storerooms
Three janitor's sink closets
Five supply closets
Dust chute
Two girls' toilets
Two boys' toilets
Women teachers' toilet
Men teachers' toilet
Elevator

The building is located at Himrod Street, Grandview Street, Amory Court, Stanhope Street, Amory Street, south of Metropolitan Avenue, in Ridgewood, borough of Queens, and has general and commercial courses. Opening in September of 1931, the school has enrolled students only in the first two years of high school.

The first school of the Grover Cleveland type to be erected was the Far Rockaway High School. This building and its layout were quite satisfactory, and there followed in quick succession the planning of five other schools of the same type—the Abraham Lincoln and the

Samuel J. Tilden in Brooklyn, the John Adams and Grover Cleveland in Queens, and the Walton High School in the Bronx.

For schools of this type, the heating and ventilating equipment costs in the neighborhood of \$240,000; the plumbing and drainage system about \$125,000; electric wiring about \$80,000; lighting fixtures about \$16,000; and furniture approximately \$135,000. All of the buildings are equipped with elevators.

A SCHOOL ADMINISTRATION BUILDING

(Concluded from Page 52)

The building will be generally available to the public for meetings, social gatherings, etc.

In 1928 the Vancouver school district erected a new junior-high-school building. The plans were drawn by Messrs. Higgins and Biedeman, architects, of Portland, Oregon. The building is of brick and terra-cotta exterior, with concrete and wood interior construction. There are 20 classrooms, a cafeteria, shops, a gymnasium

measuring 100 by 54 feet, and an auditorium seating 1,200. While the present enrollment is about 600, provisions have been made for enlarging the building to double its present classroom and shop capacity.

The building is named after C. W. Shumway, who headed the Vancouver schools as superintendent for 35 years, and who is now living in retirement in the city.

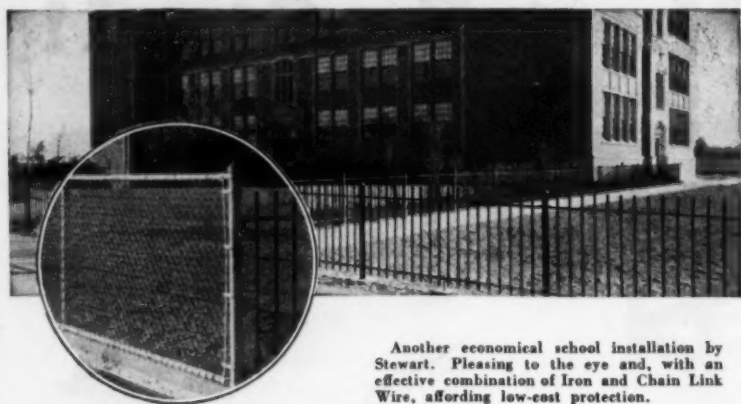
♦ Columbus, Ohio. The school expenditures for 1931 were \$65,000 less than in 1930, due to a readjustment of the teaching load, a decrease in sick benefits, and a reduction in the building program of the schools.

♦ Mansfield, Ohio. The school board has been able to continue the operation of the schools for the full nine-month period, by effecting a saving of \$54,139 in school-operating expenditures. Previously, it had appeared probable that the schools would be able to operate only eight months.

♦ Vancouver, Wash. The voters recently approved a bond issue of \$94,000 to take up outstanding warrants, reducing the interest from 6 to 5 per cent. At the same time, they approved a special tax levy of 6 mills to raise \$45,000 for school purposes.



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NOT JUST QUALITY BUT SUPREME QUALITY

SCHOOL BOARD NEWS

♦ Wadsworth, Ohio. A suit has been started in the common pleas court to recover \$125,000 of city and school funds in the Wadsworth Savings & Trust Company which recently closed. The school board has retained an attorney to obtain \$39,000 of the school money in the bank. The city and school funds are secured by personal bonds furnished by directors of the bank and the court action is directed against the directors, the bank, and the state department.

♦ Louisville, Ky. Supt. Fred Archer has announced that the public schools will close on May 13, a month earlier than last year, unless the teachers and supervisors volunteer to work without pay for two weeks. The school board is facing a deficit of \$250,000 which is attributed to a shrinkage in tax duplicates and a large list of tax delinquents.

♦ Springfield, Ohio. As an economy measure, the school board recently voted to eliminate the position of director of schools held by Mr. H. F. Shultis. Mr. Shultis has been retained as assistant superintendent, under the direction of Supt. F. M. Shelton, until July 1, 1932. The action of the board was taken as a means of curtailing expenses and of providing for practical working conditions in the work of the board.

♦ The St. Louis board of education has adopted a rule prohibiting commercial and advertising activities resulting in private or financial gain. Exhibitions, advertisements, the taking of photographs, etc., is specifically prohibited. Teachers are not permitted to take contributions from pupils for any private organization, or for personal gifts. The new rule frowns upon any interruption of the school program, upon the use of names of pupils by outside persons, etc.

(Law)

♦ C. F. Kuchenberg, city attorney of Marinette, Wis., has recently rendered an opinion, in which he holds that school cadets may act in the capacity of traffic aids in helping children cross the streets near schools, without incurring any liability for the city in case of accidents.

♦ Superior, Wis. The school board has completed two school building projects, comprising a new administrative unit for the Central High School, and a vocational shop building. The former project was completed at a cost of \$135,000, and the latter at a cost of \$70,000.

♦ Rock Springs, Wyo. Construction work has been started on a senior high school, to be completed in August, 1932. The building, which is centrally located, serves a large high-school population residing within a three-quarter-mile area.

♦ Indianapolis, Ind. The special committee on textbooks has recommended the adoption of a plan for renting schoolbooks to pupils. The rental plan would be patterned after that used in Gary, and the service would be available for children in the first twelve grades.

Under the plan, the books would be rented to pupils on a basis of enumeration in the grades, the cost of the books, and the amount necessary for replacement in three years. Fumigation would be provided to meet the requirements of the board of health.

♦ Court action has been threatened in Kansas as a result of the 25-per-cent cut by the state schoolbook commission in the textbook price list. The cut on state-published books was ordered by the commission last fall, at the suggestion of the governor. The state auditor is not in favor of issuing warrants to cover refunds to book dealers on cash sales made to them by the commission prior to the price reduction.

♦ Memphis, Tenn. The school board has proposed the sale of \$800,000 in school-tax-anticipation warrants to insure the operation of the city schools for the balance of the school year. Failure of the tax-warrant sale would mean that the board would be forced to issue scrip warrants in payment of salaries. Local civic organizations have adopted recommendations, calling for a reduction of \$269,000 in the school budget.

♦ Cuyahoga Falls, Ohio. The school board has ordered a reduction in salaries and in positions in an effort to keep within the school income. The school board has issued an appeal to the taxpayers to pay their taxes in order that the schools may be continued for the full nine months.

♦ Bloomington, Ill. The board of education has cut one month from the school term, in order to save about \$32,000 and to aid in balancing the school budget.

♦ Grand Rapids, Mich. The school board has taken up with the teachers' committee plans for salary reductions during the next school year. President George A. Davis urged that the salary schedule be retained, but that any reductions be approved as an emergency measure for the period of one year only.

♦ Louisville, Ky. The city controller has presented a report to the mayor, in which he recommends economy in the operation of the city schools during the balance of the year ending August, 1932. The controller showed that the board of education operated at a deficit during the past school year and had borrowed \$80,000 from funds obtained through a bond issue.

♦ Akron, Ohio. The board of education has made plans for the operation of the schools in 1932 with a

new loss of \$100,000 in revenue. The new loss is in addition to the \$1,065,000 reduction previously estimated by Supt. T. W. Gosling. Mr. Gosling pointed out that in 1932, the schools must meet \$694,000 in bond retirement and \$467,000 in interest on its bonded debt of \$9,000,000.

♦ Rockford, Ill. The school system will be operated in 1932 with an appropriation of \$1,510,038, which is a reduction of \$221,085 from that of 1931. The school board has outlined a radical program of economy for 1932. The new budget provides for a reduction of \$95,297 for teaching services, which includes reductions of salaries for school employees and school executives.

The present budget is based on appropriations on a tax levy of \$1.56 for each \$100 of valuation. The rate is 13 cents lower than in 1931, when the tax rate was reduced 31 cents.

♦ Pontiac, Mich. The board of education has taken the first steps in a campaign to encourage the payment of delinquent city and school taxes. Letters have been sent to city property owners, on which city and school taxes are delinquent, urging that taxes be paid by all who can make the payments. Taxpayers were urged to pay their taxes in order that the city and the schools may be able to maintain essential services.

♦ Indianapolis, Ind. Mr. A. B. Good, business manager of the school board, has reported a reduction of \$446,000 in the outstanding bonded indebtedness of the schools. The school board has outstanding bonds totaling \$11,035,000 and a remaining bonding margin of \$2,496,608.

♦ Bay City, Mich. Salary cuts, ranging from 5 to 15 per cent for all school employees receiving more than \$1,000 a year, have been voted by the school board. Teachers having contracts with the board were asked to sign riders, agreeing to the reduction.

♦ Ashtabula, Ohio. A reduction of 10 per cent in salary, from the superintendent down, has been ordered by the school board. The action was taken to make it possible to keep within the school income for the balance of the school year.

♦ Shaker Heights, Ohio. The school board has voted to cut the salaries of all school employees by 10 per cent. The reduction was made applicable to those receiving \$500 or more in salary.

♦ Mr. L. C. Wicks, for fourteen years principal of the high school at Fremont, Nebr., died suddenly on January 15, after a brief illness.

♦ Mr. R. A. Quick has been elected superintendent of schools at Alvo, Nebr., to succeed A. T. Snedgen. Mr. Quick is a graduate of the Nebraska University and holds the degree of bachelor of science.

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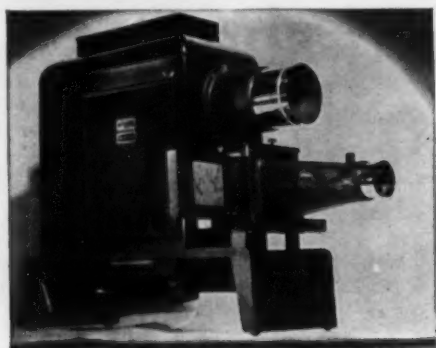
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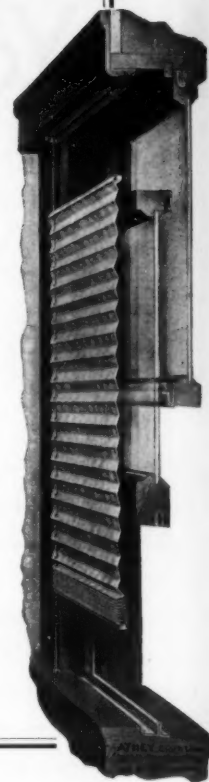
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The High-School Cafeteria

Rhue E. Green

(Concluded from January)

Serving Counter

The serving counter which is located near the main entrance and extends, as a rule, approximately 50 ft. across the end of the room, provides in order, beginning at the traffic entry: (1) tray and silver table, (2) bread-and-butter table, (3) salad table, (4) steam table, (5) dessert table, (6) cold-drink table, and (7) the hot-drink table. These seven sections of the serving counter are reported in 69 per cent of the cafeterias. The numbers of schools according to their enrollment, providing certain items in the dining room are indicated in Table III.

Various other items of equipment found in the dining room are listed in the table. A large

number, namely, 94, provide a drinking fountain in the room; 79 report dish trucks, and 78 food trucks. A separate soda fountain, where students may be served ice cream and cold drinks, is reported in only two schools.

Faculty Dining Room

Twenty-four per cent of the cafeterias have separate dining rooms for the faculty. Table II indicates the percentages of various-sized schools providing this part of the unit. Eight schools reserve tables for faculty members. In all but one case, where a faculty dining room is provided, the serving is done from the counter in the main lunchroom.

TABLE III. Number of High Schools of Various Enrollments Having Various Items of Dining-Room Equipment

Item of Equipment	Number According to Enrollment						Total Number Schools
	750 -1,000	1,001 -1,500	1,501 -2,000	2,001 -2,500	2,501 -3,000	Over -3,000	
Coffee urns	20	35	22	12	10	11	110
Patron guide rail.....	15	28	23	13	10	11	100
Milk cooler	19	26	21	10	9	10	95
Drinking fountain	20	35	25	13	10	11	94
Steam table	12	25	21	12	10	11	91
Butter cutter	12	26	18	12	10	11	89
Ice-cream container	10	22	19	11	10	11	83
Silverware trays	10	21	20	10	10	11	28
Cash register	13	21	21	8	9	10	82
Dish trucks	10	19	18	11	10	11	79
Food trucks	3	18	20	7	9	11	78
Bread table	8	19	19	10	9	8	73
Soiled-dish trays	8	12	12	10	10	9	61
Hot-water urns	3	9	12	7	7	8	46
Napkin racks	5	9	7	4	7	8	40
Change machine	2	7	4	2	1	1	17
Number schools	21	38	25	13	10	11	118

The Kitchen

No cafeteria unit is complete without a kitchen. As pointed out in Table II, this room is found in every cafeteria unit. It is desirable, from the standpoint of economy, that the kitchen be divided into distinct working units, so that necessary equipment and materials for use may be close at hand. Persons working in the kitchen are less likely to interfere with one another.

According to the reports from the 118 cafeterias, each one has a kitchen located in the rear of the serving counter, and connected directly with the lunchroom. The cases are about evenly divided with respect to having single or double connecting doors.

The amount of floor space provided for kitchen purposes depends upon the number of seats in the dining room. The average area for the group of schools is 2.9 sq. ft. for each seat in the dining hall. Ford (p. 29) recommends from 1 to 1½ sq. ft. per dining-room seat as adequate. It is apparent that the cafeterias have been more generous in providing kitchen space than dining-room space.

The newer buildings show a strong trend toward concrete floors overlaid with battleship linoleum. In the buildings constructed since 1920, 84 per cent make this provision, while only 32 per cent of those constructed during or before that year are so equipped. All but two of the schools reply that the kitchen walls may be easily cleaned.

Requirements for kitchen equipment depends largely upon the size of the cafeteria. The number of schools of various enrollments furnishing the more important items of equipment are shown in Table IV. The universal items are the cooking table and the range. A greater proportion of all items are found in the schools of

(Concluded on Page 100)



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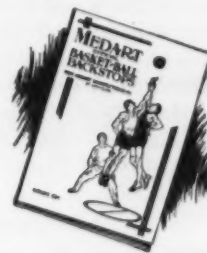


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(Concluded from Page 98)

larger enrollments. Such items as the bakeoven and ice-cream machine are more essential in cafeterias serving large groups of students. Smaller cafeterias do not make their own pastry and ice cream.

Dishwashing Pantry

Since a separate dishwashing pantry eliminates cross traffic, and requires no more space, it is desirable to have this room separate from the kitchen, especially in a school which serves large numbers. Table II shows that only 9 per cent of the schools furnish this auxiliary room of the cafeteria unit. In all of these schools there is a direct connection between this room and the kitchen.

Storeroom

In contrast to the generous space given to dining room and kitchen, the number of auxiliary rooms is meager. Only 78 per cent of the

cafeteria units contain storerooms; not all of these are adequate in size, according to comments of the managers. All of these storerooms are accessible to the kitchen.

Refrigeration

According to Table II, only 10 of the schools provide special refrigeration rooms in the cafeterias. Some form of mechanical refrigeration is used by 76 per cent of the units; 12 per cent use both ice and mechanical. The floor plans of the schools show that the refrigeration room is directly connected with the kitchen.

Policies of Administration

This paper has been devoted, in the main, to the physical aspects of the cafeteria. But it is necessary to mention three of the administrative policies affecting to a great extent the room and equipment provisions.

If the entire student body is dismissed at the

same time for the lunch period, it is evident that greater provisions must be made for equipment and space. The policies in this connection have been ascertained. An economy is practiced in 82 per cent of the schools, by dismissing the school in different shifts. The number of shifts ranges from 2 to 4, with the typical number 4.

A checking table is located at the end of the serving counter. In order to expedite the service, it is desirable to check the food at the first register, and allow the student to pay as he leaves the room. Nine schools of the group employ this practice. The remaining 109 check and charge at the same register at the end of the serving counter.

A third policy affected by the room provisions is that of purchasing supplies in wholesale quantities. Adequate storage space enables the management to effect a great economy in the purchase of supplies in large quantities. Ninety-four per cent of the schools buy supplies wholesale. However, a number of these are limited in the amounts. Twenty-two per cent of the managers reported that storage space was inadequate for economical purchasing.

SCHOOL LAW

♦ "There is at present no statutory authority in the State of Ohio, which permits a board of education to expend the school funds for charity," is the opinion recently rendered by the attorney general of Ohio: "The general code sets forth in clear and unambiguous language the circumstances under which boards of education are empowered to expend school funds for textbooks, personal necessities, and medical care for a child or for persons entitled to the services of the child in order that the child may go to school. This may be done only in cases where the child is 'absolutely required to work at home and elsewhere in order to support himself or help support or care for others legally entitled to his services.' This does not authorize the extension of poor relief as such."

TABLE IV. Number of Schools According to Enrollment Having Various Items of Kitchen Equipment

Item of Equipment	Number According to Enrollment						Total Number Schools
	750 -1,000	1,001 -1,500	1,501 -2,000	2,001 -2,500	2,501 -3,000	Over -3,000	
Range	21	38	25	13	10	11	118
Cooking table	21	38	25	13	10	11	118
Soiled-dish table	14	22	21	12	8	10	87
Vegetable sink	19	19	18	12	8	9	85
Clean-dish table	10	18	21	12	10	10	81
Pot sink	12	19	15	10	9	10	75
Dishwashing machine	10	20	12	9	8	9	68
Mixing machine	8	12	17	9	8	10	64
Vegetable peeler	4	10	18	10	9	11	62
Steam kettle	8	13	10	7	8	8	54
Bakeoven	3	9	11	8	7	7	45
Bread rack	5	11	12	2	8	4	42
Meat refrigerator	3	8	7	7	8	8	41
Meat-cutting table	4	7	8	6	8	7	40
Vegetable steam	2	8	7	6	9	5	37
Ice-cream machine	2	4	8	7	7	6	34
Butcher's block	1	3	9	4	7	8	32
Number schools	21	38	25	13	10	11	118

MILK isn't the only Purchase you make that's GRADED—



Apply to the buying of paper towels for your school washrooms the same careful discrimination which you give to the purchase of milk and food for the children entrusted to your care. The cheapest paper towels are seldom as safe and never as economical as the best quality you can buy.

Provide your school youngsters with A. P. W. Onliwon Paper Towels. They provide a sanitary service at a saving that is real economy.

Fill out the coupon below and let us convince you.

Pioneers for Cleanliness since 1877



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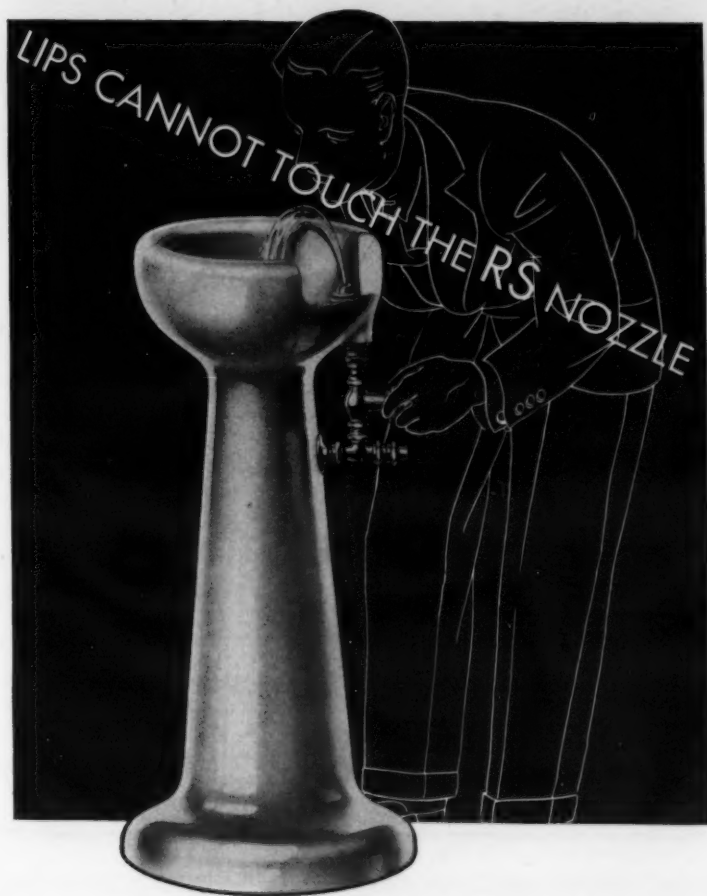
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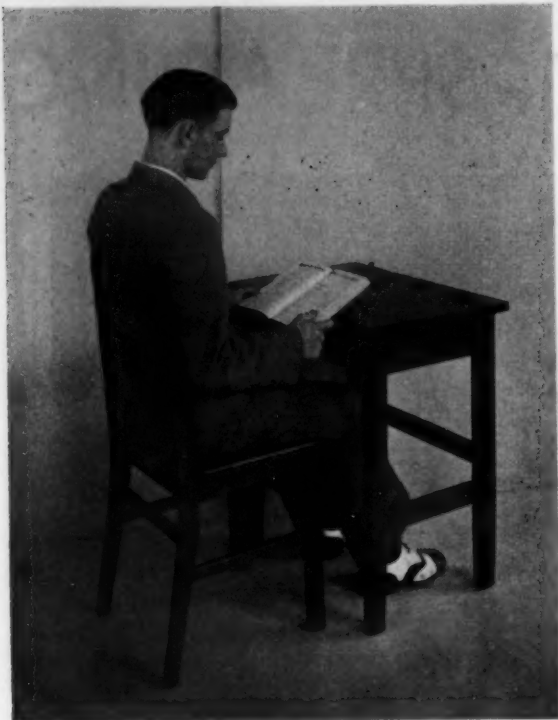
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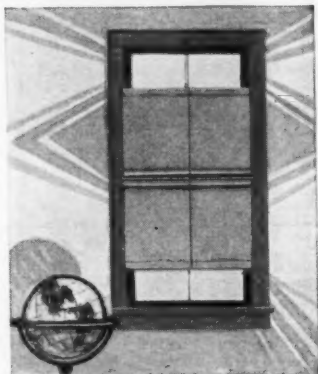
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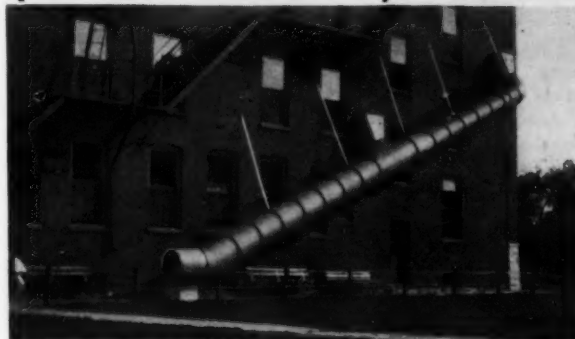
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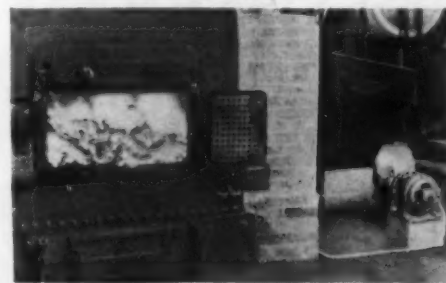
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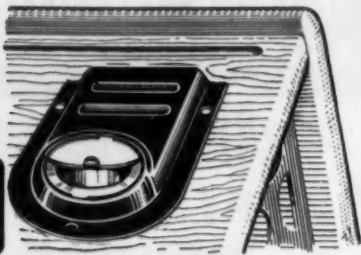
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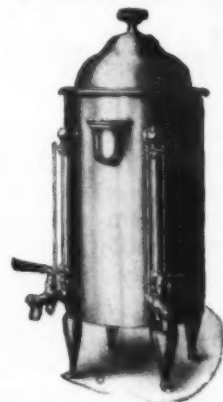
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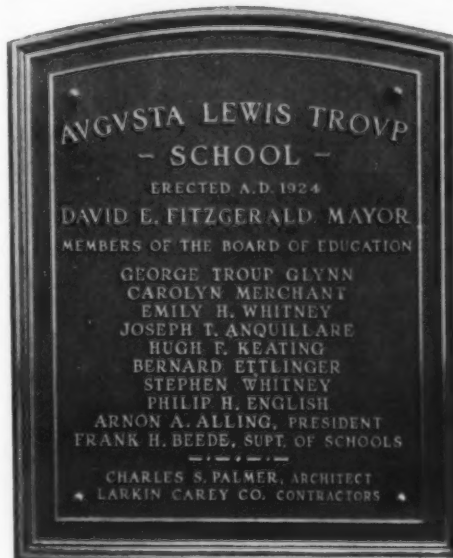
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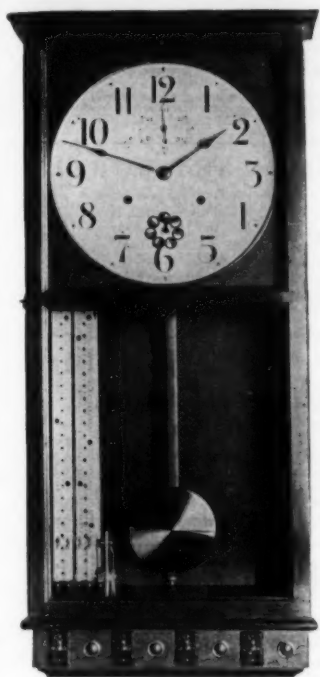


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12:56
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2:20
2:24
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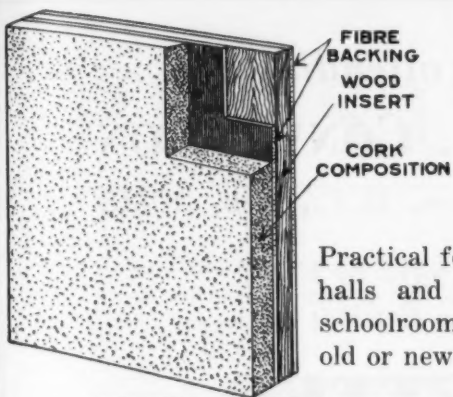
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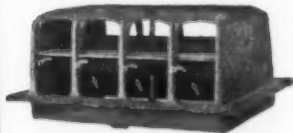
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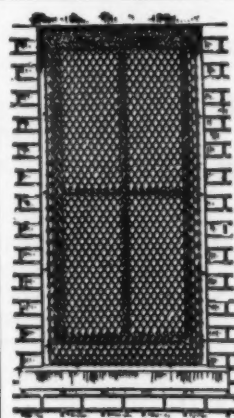
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TO THE CHILDREN**

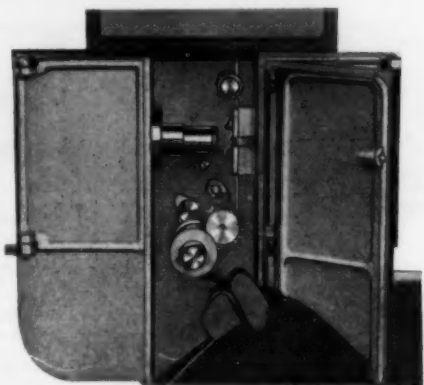
Give them an even chance in case of fire. Install a signal with a volume that can be heard... one that possesses a distinctive tone more powerful than gongs, bells, whistles or other common sound producers. **FEDERAL TYPE "A" SIRENS** modernize the school fire signal. Write for Bulletin No. 38

FEDERAL ELECTRIC COMPANY
8714 So. State St., Chicago, Ill.

Sound Picture Equipment

Priced within your Budget

Clear full tones.
Latest improvements in sound engineering



Complete
A.C.
operated.
Uses no batteries

Mellaphone Equipment is used the world over in theatres, Schools, and institutions with consistently excellent results. Simple; accurate, and clear full tones. Easily adjusted with the utmost precision, trouble-proof, quiet,—uses no chains.

Two Sound Heads, one Mellaphone All-Electric Theatric Amplifier and Stage Speaker now completes a sound installation equal to the best. Standard full-sized equipment that will deliver the utmost in sound expectations. Lens and electrical units are the best obtainable.

Write for full information.
Music Reproduction and Public Address Systems.

MELLAPHONE CORPORATION
ROCHESTER, NEW YORK

While attending the N. E. A. CONVENTION

at Washington, D. C., Feb. 20-25

Be Sure to Visit
our Exhibit of

BETTER EQUIPMENT for your STAGE

in Booth 304

Distinctive Quality and
Service at a Reasonable Cost.

Write

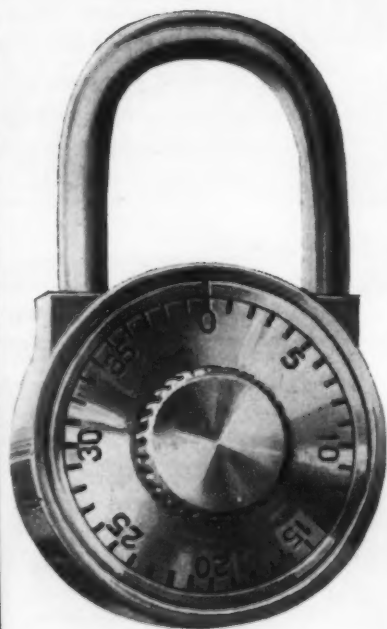
Twin-City Scenic Co.

2819 Nicollet Ave.
Minneapolis, Minn.

2310 Cass Ave.
Detroit, Mich.

GOOD-BYE

BROKEN
SPRINGS
—
LOST
KEYS
—



You, who have suffered in the past from rusted or broken springs in your locker locks and lost keys, can find permanent relief for your lock problem in the **NEW** springless, rust-proof, **AUTOMATIC**, double locking

BARRETT AUTOMATIC

Your personal inspection of a Free sample will convince you.

Send for your sample today.

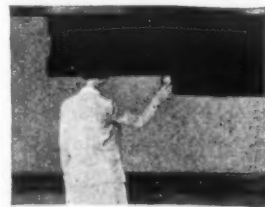
Barrett Automatic Keyless Lock Co.
Dept. F, Upper Darby, Pa.

Color fades

Blackboards fade . . . Value fades

Fading is the cause of grey blackboards. The source of serious eyestrain. Now—a new way to restore the color and protect against fading for years.

Send for
FREE Sample



Alatal cleans, colors, sterilizes, penetrates and protects for years.

Fading is easy to understand and easy to prevent. See U. S. Department of Interior, Geological Survey, Bulletin No. 586—"Slate in the United States"—page 55. Government engineers and chemists have proved that fading of blackboard slate is caused by a chemical action.

First the original, slightly roughened surface becomes filled with clay from chalk. This makes blackboards too smooth and glarey—chalk marks hard to see. Next carbon dioxide and acids in the air and water combine with the carbonates in all blackboard slate. The surface gradually becomes grey, soft, porous, then rough. Blackboards generally fade and deteriorate unless they are protected and cared for properly.

A sure way to restore faded color and prevent deterioration is to Alatal the blackboard. Alatal is a liquid, antiseptic, blackboard renovator developed by Robert Gardner. He has invented machines and processes that have renewed millions of square feet of old blackboard in the United States and Canada. Send for free sample.

Alatoling is easy. First sandpaper the surface lightly by hand. Then saturate a felt eraser and rub it over the board. Instantly you restore the natural blue-black color. Alatal penetrates, sterilizes and protects for years against fading and deterioration because carbon dioxide and acids in the air and water cannot affect it. There is nothing else like Alatal. Try it free.

A child can renew 2 large rooms, about 300 square feet, in 30 minutes with 1 regular 8-ounce can of concentrated Alatal. Cost per can delivered is \$3.00. Just about 1 cent per square foot or 1/70 of the replacement cost. If your blackboards have faded, deterioration has started. You are urged to try this economical method of renewal and maintenance at our expense. It will instantly relieve you of the responsibility for eyestrain and the spread of contagious disease. Do not delay.

Alatal is guaranteed to save blackboards, save eyesight, save health, save money. You can save blackboards worth \$15 with a free sample. Mail the coupon.



\$3. Spent for ALATAL
May Save You \$300.

©1932, The Alatal Co.
Reg. U. S. Pat. Off.

Save by mailing this coupon to-day

The Alatal Co., 18 W. Cheltenham Ave., Phila., Pa.

Send **FREE** sample.

Name.....
Address.....
City.....State.....

PRESTIGE

Success, reputation, the reward of achievement—all these are expressed in this one word—PRESTIGE.

For many years the name **WELCH** on School and Laboratory Equipment has enjoyed the Prestige of being recognized as the highest standard of quality.

WELCH
Laboratory
FURNITURE

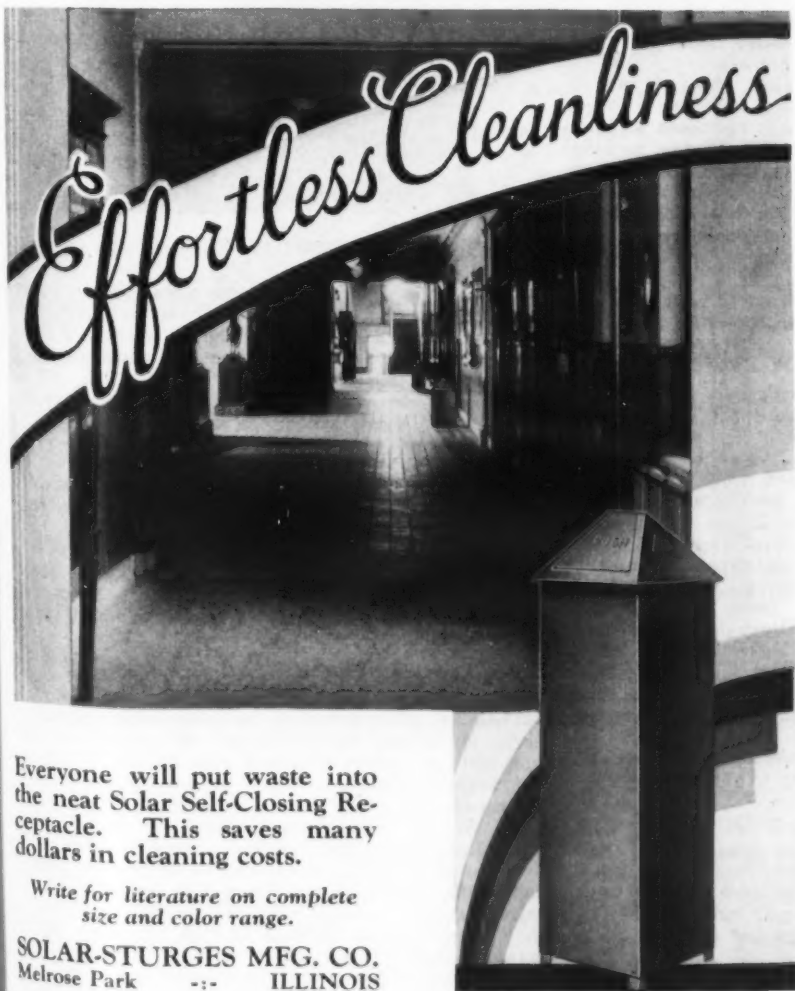
1880—Over Fifty Years of Service to Schools—1932

W. M. WELCH MANUFACTURING COMPANY

GENERAL OFFICES: 1515 Sedgwick Street CHICAGO, ILLINOIS
LABORATORY FURNITURE FACTORY MANITOWOC, WISCONSIN
SCIENTIFIC APPARATUS FACTORY AND WAREHOUSE 1516 ORLEANS ST., CHICAGO, ILLINOIS

BRANCHES

342 MADISON AVE. 1916 WEST END AVE. 34TH AND BROADWAY 2220 GUADALUPE ST.
NEW YORK CITY NASHVILLE, TENN. KANSAS CITY, MO. AUSTIN, TEXAS



Everyone will put waste into the neat Solar Self-Closing Receptacle. This saves many dollars in cleaning costs.

Write for literature on complete size and color range.

SOLAR-STURGES MFG. CO.
Melrose Park ILLINOIS

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After the Meeting

DRASTIC ACTION

Dr. Carter Alexander holds that drastic action in school administration is rarely necessary. Sometimes, however, a school executive must act as did the treasurer of a certain church. Financial affairs of the institution had been long neglected when a newly elected treasurer took hold and wrote a letter to the delinquents. After a second letter all but one man had paid up. This man received a third letter which caused him to send his check forthwith. The pastor never quite understood why the letters were so effective until he met the man on the street.

"Our new church treasurer writes a fine letter," said the man. "He ought to spell better."

"Yes?"

"Yes, you ought to help him on that. He spelled 'lousy' with two 's's' and had a 'c' in 'skunk.'"

HOW MATTHEW ARNOLD SUPERVISED

A teacher writing in the *Teachers World*, of London, relates a story concerning Matthew Arnold, that is worth repeating for the benefit of school supervisors:

During a reading lesson the word *menagerie* turned up and was pronounced by a girl *menagery*, in the usual English way.

Matthew Arnold drew the girl up, pointing out that the word should be pronounced "menajeree," giving it the French sound. A second attempt was made and still the girl failed to imitate the inspector's pronunciation. Speaking to her rather hastily, Mr. Arnold said: "I told you the word should be 'menajeree.' Now, I shall be angry if you do not pronounce the word as I say."

The girl began to cry, and the headmaster, stepping up to the great man, reminded him that the girl was only doing as she had been taught.

The reading proceeded without interruption for a few minutes, then, noticing that the girl was still weeping, Mr. Arnold called the class to attention, and before the listening children and master, he walked across to the girl, touched her, and said: "My dear, I am very sorry I spoke to you so sharply. I ought not to have done so. I do hope you will forgive me."

NO SUGAR NEEDED

During a lecture on foods to an audience of Negro schoolboys the speaker asked: "Can someone tell me a good breakfast food?"

"Yassuh," said a boy in the front row. "Cawnbread an' molasses." — *Journal A. M. A.*

TOOK PITY ON HIM

"Tell me the truth now, Eric. Who did your homework in arithmetic?"

"Father."

"Quite alone?"

"No, I helped him with it." — *Youth's Companion.*

NO EXCUSE

College Lad (arrested for speeding): "But, your honor, I am a college boy."

Judge: "Ignorance doesn't excuse anybody."

THE TAIN OF DISGRACE

"Your father was a college man, wasn't he?"

"Yes, but we never mention it. The college he went to had a rotten football team." — *Transcript.*



TRUE TOO

Teacher: Jimmy, why do you spell bank with a large B?

Jimmy: Cause my pa says that a bank is no good unless it has a large capital.

Buyers' News

TRADE NEWS

Albert Pick-Barth Centers Business in Chicago. The Albert Pick-Barth Company, Inc., has announced the closing of its eastern branch office in New York. The work has been taken over by the Chicago division and all service will be handled through the main office at 1200 West 35th Street.

Mr. Gregg Honored. Mr. John Robert Gregg, founder of the Gregg shorthand system, was the guest of honor at the annual banquet of the National Commercial Teachers' Association in Chicago. Mr. Irving R. Gerbutt, director of commercial education in Cincinnati, and president of the association, delivered the principal address before the teachers.

Change in Name. The Circle A Products Company, Newcastle, Ind., has announced that the firm name has been changed to Newcastle Products.

New Federal Siren Equipment. The Federal Electric Company, 8700 South State St., Chicago, Ill., has issued its new Bulletin No. 38, illustrating and describing the various types of fire sirens, together with auxiliary fire-alarm equipment.

The bulletin describes Fedelcode sirens, automatic code control equipment, and automatic general-alarm control panels.

Complete information may be obtained by any school official upon request.

Mr. Holden Will Exhibit. Mr. Miles Holden, who exhibited the famous Holden book covers at the National Education Association during the panic years of 1893-94, and again in 1907, and in 1920 and 1921, will have a display of Holden repair kits at the Washington N. E. A. Convention in February, 1932.

New Holophane Catalog. The Holophane Company, Inc., 342 Madison Ave., New York City, has just issued its new Catalog No. 375-J, which describes the new developments in lighting for 1932, including flush-wall indirect lighting, artificial sunlight units for use in general lighting, and flush, direct-lighting ceiling units for low ceilings.

The catalog includes an engineering section, in which are given the general principles underlying all kinds of lighting, special illuminating engineering data derived from investigations and studies in the field, and regulations governing the intensity of illumination.

A copy of the catalog will be sent to any school official, or architect, who requests it.

Sealex Wall Covering. Congoleum-Nairn Inc., of Kearny, N. J., have just issued a new booklet, describing and illustrating the new Sealex wall covering for use in school wainscoting. The material is attractive in appearance and composition and is useful in producing unique and distinctive decorative effects at a very low cost.

Sealex wall covering has unusual beauty, is easy to apply, durable, sanitary, obviates refinishing expense, and is low in first cost. Sealex is composed of cork, pigments, and linseed oil, attached to a fabric backing, and presents a waterproof surface which is impervious to dirt and which can be easily cleaned by applying a damp cloth. It makes possible a new type of wall treatment in combination with molding, paneling, or two-tone treatment, without the expense of marble or other costly decorative schemes.

Complete information and prices will be sent to any school official, or architect, upon request.

TRADE PRODUCTS

New Improved Holmes Projector. The Holmes Projector Company, 1815 Orchard St., Chicago, Ill., has announced a new sound-on-film projector for school use. The projector is of standard size, weighs less than 90 pounds, is equipped with a 1,000-watt lamp, and is capable of sound projection found only in the large and higher-priced projectors.

The projector is a new, improved type, which has been produced after many years of experiment on the part of Mr. O. J. Holmes, the inventor and manufacturer. It has a shaft-drive, portable feature, is equipped with a picture shutter between the aperture and the lamp, an independent motor rewind, and a ventilating system for cooling the lamp house. The illumination and projection, together with sound, are very powerful, and will perfectly accommodate an audience of 4,000 persons.

Complete information and prices may be obtained by any school official by writing to the Holmes Projector Company at Chicago, Ill.

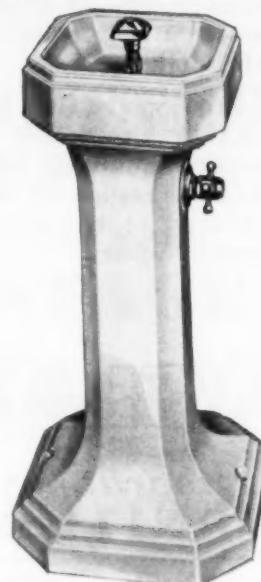
New Composition Blackboards for Schools. The new composition slate blackboard, "Seloc Slate," just placed on the market by the New York Silicate Book Slate Company, 20 Vesey St., New York City, has been produced in response to a demand for a blackboard having the characteristics of slate but commanding a lower price.

The new "Seloc Slate" blackboard is composed of wood fibers in long lengths, impregnated in oil, and formed by means of high pressure into the proper thickness. Each sheet is 1/4 in. thick, is waterproof, and will not warp or bulge. It offers an easy writing surface,

insures a clean, full chalk mark, and easy erasure. Where sheet lengths of more than 12 ft. are required, the joints are cemented without being covered with molding.

The blackboard may be obtained in widths of 3, 3 1/2, and 4 ft., and in lengths of 6, 7, 8, 10, and 12 ft. Complete information may be obtained by any school official upon request.

Announce New Rundle-Spence Pedestal Fountain. The Rundle-Spence Mfg. Company, 444 N. Fourth St., Milwaukee, Wis., has announced its new rectangular pedestal drinking fountain, which is equipped with an octachrome type of china, or chromium-plated bubbler head.

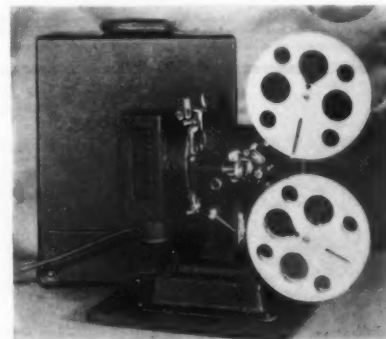


RUNDLE-SPENCE
PEDESTAL FOUNTAIN

The Rundle-Spence drinking fountains have been approved for more than a quarter of a century by the architectural and building professions as standing at the front rank in drinking-fountain standards. These fountains have met the various changes in design, are strictly in keeping with modern sanitation, and are the latest word in drinking-fountain manufacture and design. The latest design is available in a variety of colors, to fit any color scheme in school buildings.

A copy of the Rundle-Spence catalog of drinking fountains will be sent to any school official upon request.

New Victor Model 7 Ciné Projector. The Victor Animatograph Corporation, Davenport, Iowa, has announced a new Model 7 Ciné Projector, which is a new, improved model affording a wider speed range and more quiet operation. The projector, which is available in three different designs, is equipped with



VICTOR MODEL 7 CINE' PROJECTOR

a 300-watt no-resistance lamp, has a transformer built into the base, and is provided with the exclusive Victor features, such as adjustable shutter, automatic film strip, and other important refinements which are embodied in the Model 7 series.

Complete descriptive information and prices may be obtained by any school official upon request.

NEWS OF OFFICIALS

♦ **MR. G. H. BACKMAN**, president of the board of education at Salt Lake City, Utah, died at his home on November 30, after a brief illness.

♦ **MR. LEONARD HATTON** has been appointed superintendent of buildings for the board of education at Wisconsin Rapids, Wis. Mr. Hatton will have charge of all janitors and will direct the maintenance of the school buildings.

A DEVICE FOR DETERMINING THE INTELLIGENCE QUOTIENT

There has arisen a demand for a simple and accurate device for figuring the intelligence quotient in connection with the testing of school children. In the past, the available devices for this purpose have proved cumbersome, or too expensive in first cost.

Mr. W. B. Noyes, superintendent of schools at Stonington, Conn., has invented a device, called the Icumeter chart, which is intended to figure accurately and quickly the intelligence quotient of any pupil. The chart contains a central revolving section, containing the mental ages of children and an indicator. The outer rim, which is stationary, contains the chronological ages and the respective intelligence quotients. A single movement of the outer rim will bring together any two mental and chronological ages, with the corresponding I.Q.

The chart sells for 50 cents, or 25 cents in quantities.

*It will stand a
tug-of-war
—try it.*

Take a Nibroc Towel. Wet it across the middle. Hold one end of it firmly with two hands. Let a good stout "husky" hold the other end. Now—both pull! Note its great strength!



An Amazing New Idea in Paper Towels

—WET STRENGTH

NIBROC TOWEL

"It has Great Wet Strength"

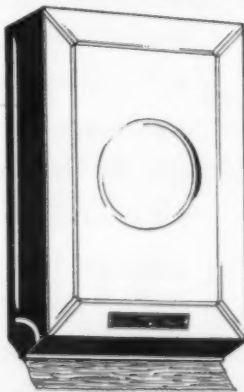
A SPECIAL Process, developed by Brown Company in their research laboratory, has created in Nibroc Towels *greater wet strength* and *quicker absorption* than ever before known in a paper towel.

The user can now wipe his or her hands and face with perfect assurance that Nibroc Towels will not disintegrate when coming in contact with moisture, no matter



ECONOMY

One case of Nibroc Towels will do the work of two or three and sometimes four cases of ordinary towels.



Handsome white enamelled cabinets are loaned to users. Hold three hundred Standard or four hundred Junior towels. Cabinet dimensions are 10½" wide, 15" high, 3¼" deep.

BROWN
Company

FOUNDED 1852



Portland, Maine

how roughly they are used.

Nibroc also retains its softness, is good to even the most sensitive skin; free from lint or fuzz and exceptionally absorbent.

One Nibroc will do the work of two, three and sometimes four ordinary towels. Nibroc are preferred by buyers as well as users.

Use Nibroc for a more satisfactory and economical towel service.

NEW YORK

ST. LOUIS

BOSTON

SAN FRANCISCO

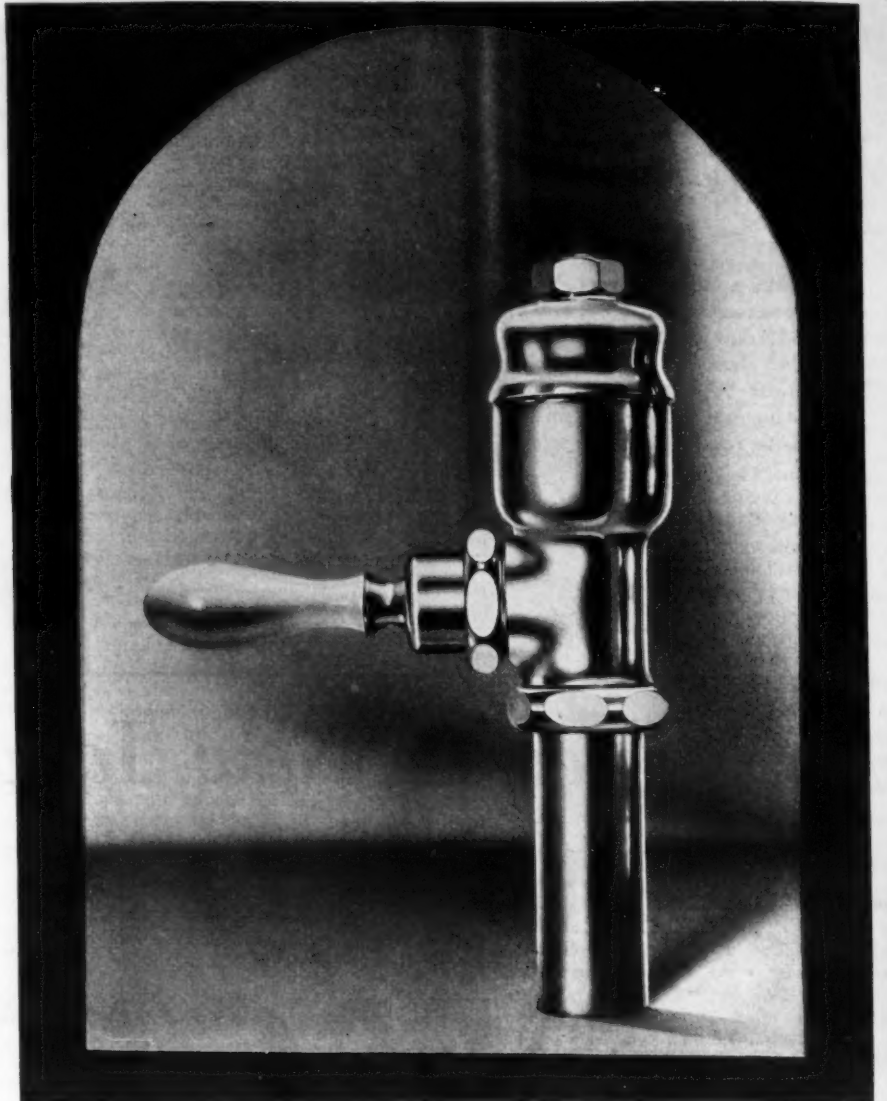
CHICAGO

MONTREAL

PARIS

THE **CROWN**

An ideal flush valve for every school requirement



In the Crown Flush Valve are combined all the features which a quarter century's specialized experience has proved practical and desirable. For school sanitary fixtures the Crown offers unusual advantages.



Crown Flush Valves respond instantly. During crowded recess periods there is no waiting for tanks to refill or pressure to be built up. As often as the valve is operated, a complete flush results.

Crown Flush Valves are easily and quickly adjusted to the precise needs of each fixture—whether it be closet, urinal or slop sink. This adjustment requires no skill and, once made, stays put. Moreover, it is protected from the careless manipulation of children.

It is impossible for the Crown to use more water than it is set for, regardless of how the handle or flushing mechanism is operated. After delivering its predetermined flush, it shuts off without waste of water. This feature is of vital importance in schools



where carelessness or deliberate intent may cause enormous loss and expense. These two advantages of the Crown—accurate adjustment and automatic closing—

save every possible drop of water without sacrificing complete and thorough sanitation.

A complete line of Crown hand-operated or automatic seat-operated flush valves, either exposed or concealed, provides for every school requirement or type of fixture, including floor or wall outlet closets, urinals and slop sinks. In addition, valves with a measured flush are available for showers and lavatories where maximum water savings are desired.

If your files do not contain complete information on Crown Flush Valves we will be glad to supply you with a catalogue. Sloan offices in all principal cities are at your disposal without obligation and will be glad to offer the benefit of our experience on school flushing equipment. Call our nearest branch or write to 4300 West Lake Street, Chicago, Illinois.

SLOAN VALVE CO • CHICAGO

for the EXTRA

Floor Protection and Sanitation

now demanded
in schools

Day after day, the tramping — scuffling — scraping of hundreds of children's feet — what a punishment school floors must take! *Extra* protection for them — for their beauty — is a necessity.

Civilization demands an increasingly higher degree of sanitation — and in the schools it must be taught, and *practiced*. Both health and habits of children demand *extra* cleanliness in school floors.

School management, recognizing the problem of this dual responsibility — has more and more turned to the *Finnell System*. *Finnell*, in response, brings to school executives a knowledge of floor protection and floor sanitation gained by a quarter century of intensive development.

Finnell equipment and *Finnell* service make a *complete system*—adaptable to any size school or group of schools—to any floor conditions or type of flooring.

To learn how *Finnell System* and *Finnell* products can be most effective and most profitable in your floor maintenance, ask for a free survey of your floors. A *Finnell* representative, skilled in floor surfaces and their treatment, will gladly call on request. His report may mean the saving of hundreds—even thousands of dollars. Address FINNELL SYSTEM, INC., 802 East Street, Elkhart, Ind.



Above—Finnell No. 90, scrubs and picks up water in one operation.

Right — Closeup showing Finnell-Kote flowing in thread-like stream from dispenser to floor.



SCRUBBERS.

Nine models from which to choose . . . a wider choice than is available in any other line. The largest, a giant *Finnell* which will scrub a mammoth gymnasium or a block long corridor in a fraction of the time it would take to mop it by hand. Scrubs and picks up the water in one operation. The smallest *Finnell*, a handy machine that can be carried about in one hand. Will scrub or polish hard-to-get-at places, stairways, etc. A right size for every need.

POLISHERS.

Every *Finnell* is a polisher, as well as a scrubber. Rubs the wax in. Polishes off the surface—leaving a beautiful, slip-proof floor.

FINNELL-KOTE.

More than just a wax . . . a floor covering. When applied hot through the special *Finnell* dispenser, it clings to the porous surfaces of floor or floor covering. Does not crack up under traffic. After fifteen or sixteen weeks of ordinary school wear the original *Finnell-Kote* will still be intact. Goes further, takes less time in maintenance, lasts longer. Comes in colors also, if desired.

SOLARBRITE.

A liquid scrub soap—made of rich, undecomposed fats. Contains no alkali. Will not injure any floor.

FINOLA.

Known for 25 years. One of the original bulk scouring powders. Safe and efficient.

SOLAR SOAP POWDER.

For use wherever a good soap powder is needed.

FULFILL.

For filling floors — has penetrating and drying qualities. Applied hot, produces a sealing and water-proof surface when cool. Available in colors, also.

TERRAZZOFIL.

For filling terrazzo floors.

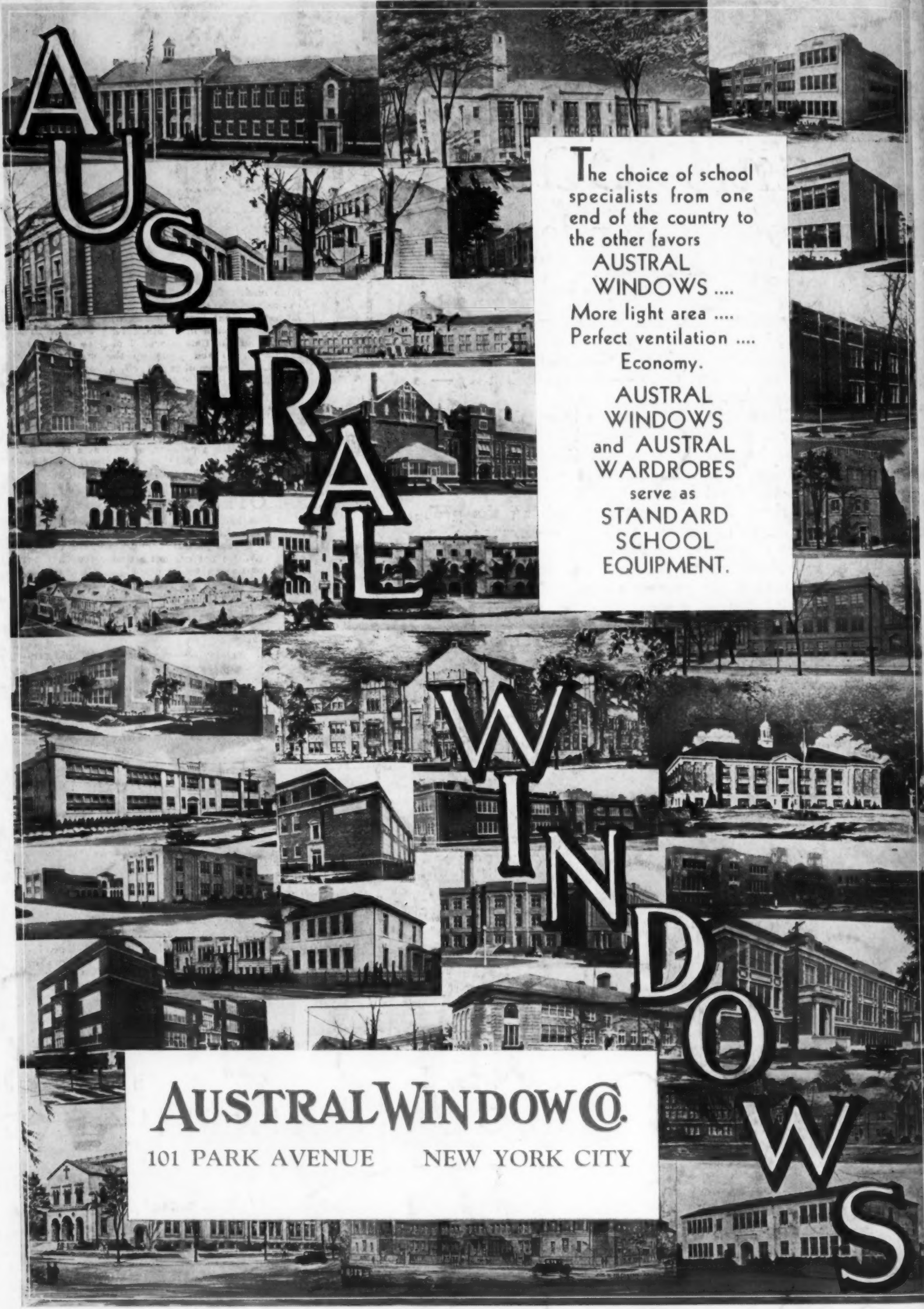
GYMFIL.

Special filler for gymnasium floors. Follow instructions carefully to obtain fast, medium or slow floors. Produces beautiful, delightful sheen; easy to sweep and clean. Seals and preserves the wood.

FINNELL SYSTEM OF FLOOR MAINTENANCE

See the Finnell Exhibit
Booth No. 83

N. E. A. Department of Superintendence
Washington, D. C. February 20-25, 1932



A
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The choice of school specialists from one end of the country to the other favors
AUSTRAL WINDOWS ...
More light area ...
Perfect ventilation ...
Economy.

AUSTRAL WINDOWS
and **AUSTRAL WARDROBES**
serve as
STANDARD SCHOOL EQUIPMENT.

W
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AUSTRAL WINDOW CO.

101 PARK AVENUE NEW YORK CITY